PB86-183456

Air Toxics Information Clearinghouse Bibliography of Selected EPA (Environmental Protection Agency) Reports and 'Federal Register' Notices

Radian Corp., Research Triangle Park, NC

Prepared for

Environmental Protection Agency
Research Triangle Park, NC

Jan 85

U.S. Department of Commerce
National Technical Information Service
NTIS

50272-101

REPORT DOCUMENTATION PAGE	**1. REPORT NO.**	**2.**	**3. Recipient's Accession No.** PB86 183456/AS

4. Title and Subtitle
Air Toxics Information Clearinghouse; Bibliography of Selected EPA Reports and *Federal Register* Notices

5. Report Date
January 1985

6.

7. Author(s)
Barbara K. Post, Caroline E. Benton, and Alice S. Pelland

8. Performing Organization Rept. No.

9. Performing Organization Name and Address
Radian Corporation
3200 Progress Center
P. O. Box 13000
Research Triangle Park, NC 27709

10. Project/Task/Work Unit No.

11. Contract(C) or Grant(G) No.
(C) EPA No. 68-02-3889
(G)

12. Sponsoring Organization Name and Address
U.S. Environmental Protection Agency
Office of Air Quality Planning and Standards
Pollutant Assessment Branch
Research Triangle Park, NC 27711

13. Type of Report & Period Covered
Interim

14.

15. Supplementary Notes

16. Abstract (Limit: 200 words)

In response to state and local agency requests for assistance in information exchange, EPA has designed and is implementing an information dissemination center, known as the Air Toxics Information Clearinghouse. This bibliography provides state and local agencies with citations to EPA publications useful to them in developing and operating air toxics control programs. It contains citations to such document types as health assessments and exposure assessments that have a clear, direct bearing on air toxics work. In addition, it contains references to background information documents for new source performance standards (NSPS) that discuss criteria pollutants. These document references are included because the sources described in the background information documents often also emit noncriteria pollutants and information relevant to noncriteria, potentially toxic pollutants is found in many background documents. Compilation of citations presented here was complete as of December 1984.

17. Document Analysis a. Descriptors
Toxic Air Pollutants
State and Local Programs

b. Identifiers/Open-Ended Terms
NATICH - National Air Toxics Information Clearinghouse
NSPS - New Source Performance Standards
NESHAP - National Emissions Standards for Hazardous Air Pollutants
FR - Federal Register

c. COSATI Field/Group

18. Availability Statement Release Unlimited	**19. Security Class (This Report)** Unclassified	**21. No. of Pages** 114
	20. Security Class (This Page) Unclassified	**22. Price**

(See ANSI-Z39.18) See Instructions on Reverse OPTIONAL FORM 272 (4-77)
(Formerly NTIS-35)
Department of Commerce

PB86-183456

AIR TOXICS INFORMATION CLEARINGHOUSE

EPA Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711
STAPPA / ALAPCO State and Territorial Air Pollution Program Administrators
Association of Local Air Pollution Control Officials

Bibliography of Selected EPA Reports and *Federal Register* Notices

January 1985

REPRODUCED BY
NATIONAL TECHNICAL
INFORMATION SERVICE
U.S. DEPARTMENT OF COMMERCE
SPRINGFIELD, VA. 22161

DCN No. 84-203-024-16-03
EPA No. 68-02-3889, WA 16

AIR TOXICS INFORMATION CLEARINGHOUSE: BIBLIOGRAPHY OF SELECTED EPA REPORTS AND FEDERAL REGISTER NOTICES

Prepared for:

John Vandenberg, Project Officer
Strategies and Air Standards Division
Office of Air Quality Planning and Standards
U.S. Environmental Protection Agency
Research Triangle Park, North Carolina 27711

Prepared by:

Barbara K. Post
Caroline E. Benton
Alice S. Pelland
Radian Corporation
Research Triangle Park, North Carolina 27709

January, 1985

DISCLAIMER

This report has been reviewed by the Office of Air Quality Planning and Standards, U. S. Environmental Protection Agency, and approved for publication as received from the Radian Corporation. Approval does not signify that the contents necessarily reflect the views and policies of the U. S. Environmental Protection Agency, nor does mention of trade names or commercial products constitute endorsement or recommendation for use.

PREFACE

EPA has focused most of its past efforts in the control of air toxics on the Clean Air Act §112 National Emission Standards for Hazardous Air Pollutants (NESHAP) program. The amount of time involved for §112 listing and eventual control is extensive. The public is concerned over continuing exposure to potentially toxic air pollutants. The resultant public pressure has had an impact such that many state and local agencies have developed or are now actively developing air toxics regulatory programs apart from Federal activities.

In response to state and local agency requests for assistance in information exchange, EPA has designed and is implementing an information dissemination center, known as the Air Toxics Information Clearinghouse. It has been designed and is being implemented in close coordination with the State and Territorial Air Pollution Program Administrators (STAPPA) and the Association of Local Air Pollution Control Officials (ALAPCO).

The purpose of this bibliography, published by the Air Toxics Information Clearinghouse, is to provide state and local agencies with citations to EPA publications useful to them in developing and operating air toxics control programs. This issue of the bibliography is an updated and expanded version of a similar bibliography published in March 1984. The bibliography contains citations to such document types as health assessments and exposure assessments that have a clear, direct bearing on air toxics work. In addition, the bibliography contains references to background information documents for new source performance standards (NSPS) that discuss criteria pollutants. These document references are included because the sources described in the background information documents often also emit noncriteria pollutants and information relevant to noncriteria, potentially toxic pollutants is found in many background documents. Compilation of citations presented here was complete as of December 1984.

This updated bibliography is one of several publications prepared by the Clearinghouse. Other publications include:

- Air Toxics Information Clearinghouse: Ongoing Research and Regulatory Development Projects - March 1984
- Air Toxics Information Clearinghouse: Selected Bibliography of Health Effects and Risk Assessment Information - July 1984
- Air Toxics Information Clearinghouse: Interim Report of Selected Information on State and Local Agency Air Toxics Activities - September 1984
- Air Toxics Information Clearinghouse Newsletter, Vol. 1, No. 1-5, Vol. 2, No. 1 - December 1983, February 1984, April 1984, July 1984, September 1984, and December 1984

Plans call for this bibliography and the first three publications listed to be updated on a regular basis and for newsletters to be published quarterly.

ABSTRACT

An Air Toxics Information Clearinghouse has been established by the EPA Office of Air Quality Planning and Standards for the purpose of facilitating information transfer among state, local, and Federal air quality management agencies. This document has been published as part of that effort. The purpose is to provide state and local agencies and other Clearinghouse users with citations to EPA publications useful in developing and operating air toxics control programs.

This document has four parts. The introductory material discusses the scope, organization, and use of the document and gives ordering information for the EPA reports and the Federal Register notices cited. Indices to the reports by document type, pollutant class or name, and source are included in Part 2. Part 3 contains the citation entries with bibliographic information and an abstract for each report and notice. Part 4, the Appendix, lists information which is available in unpublished form from the sources indicated.

This document was submitted in partial fulfillment of Contract No. 68-02-3889, Work Assignment 16, by the Radian Corporation under the sponsorship of the U.S. Environmental Protection Agency. It supercedes the first edition of this document published in March 1984 entitled Air Toxics Information Clearinghouse: Bibliography of EPA Reports. This second edition contains all the citations listed in the previous edition plus citations to any new EPA reports published since January 1984. In addition, it includes for the first time citations to Federal Register notices pertaining to the Clean Air Act §111(d) NSPS and §112 NESHAP programs and recent proposed guidelines issued by the Office of Health and Environmental Assessment. All citations which are new to this edition are indicated by an asterisk. Compilation of citations for this edition was completed in December 1984 and the document was published in January 1985.

CONTENTS

Part 1. Introduction 1

Part 2. Indices. 5

Document Type. 5

Pollutant Class/Name 15

Source 25

Part 3. EPA Report and *Federal Register* Notice Entries 45

Part 4. Appendix 99

PART 1. INTRODUCTION

This bibliography has been developed by the Air Toxics Information Clearinghouse and the Pollutant Assessment Branch of the EPA Office of Air Quality Planning and Standards (OAQPS). Over 375 bibliographic citations of EPA reports and Federal Register notices pertinent to state and local agency concerns over air toxics are included. To facilitate the use of this bibliography, the citations are indexed by document type, pollutant name/class, and source.

Like other Clearinghouse publications, this bibliography is designed to help Clearinghouse users identify sources of information for specific air toxics questions or problems. The second edition of the bibliography announces over 75 new reports and lists citations to 40 Federal Register notices. In future updates of this bibliography, new reports and notices will be added.

Document Scope

This bibliography contains a selected list of EPA reports and Federal Register notices which have been identified as being useful to state and local agencies developing and operating air toxics control programs. The EPA reports include the following:

- health assessments
- exposure assessments
- source assessments
- emission factors documents
- technical monitoring documents
- methodologies for source sampling and ambient monitoring, and
- New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP) background information documents.

Citations for each of these types of documents were compiled by contacting the EPA office currently conducting that particular type of work. The following EPA offices were contacted:

- Office of Air Quality Planning and Standards,
- Office of Health and Environmental Assessment,
- Office of Pesticides and Toxic Substances,
- Office of Solid Waste and Emergency Response, and
- Office of Research and Development.

Abstracts for the EPA reports appearing in this document were obtained from the EPA Publications Bibliography, the National Technical Information Service (NTIS) data base, or the technical data sheet included at the end of EPA publications.

The Federal Register notices include the Agency's announcements regarding Sections 111(d) and 112 of the Clean Air Act dealing with the New Source Performance Standards and the National Emission Standards for Hazardous Air Pollutants programs, respectively. The notices also include proposed guidelines concerning health, exposure, and risk assessments issued by the Office of Health and Environmental Assessment.

Abstracts for the Federal Register notices were prepared from the Summary and Supplementary Information sections of each notice.

Organization of Document

This document consists of four parts. The introductory material discusses the scope, organization, and use of the document and gives ordering information for the cited EPA reports and Federal Register notices. Part 2 consists of three indices that will enable users to identify reports and notices of interest. All of the published EPA reports and Federal Register notices in the third part of this bibliography are indexed by document type, pollutant class or name, and source. Part 3 contains the report and notice entries with bibliographic information and an abstract for each citation. All the reports in this section are published EPA reports available from the National Technical Information Service (NTIS). All of the Federal Register notices are available from the U.S. Government Printing Office. Part 4, the Appendix, lists information which is available in unpublished form from the sources indicated. The items listed in the Appendix are not included in the indices.

The Agency recognizes that this organization departs from the standard format in which the indices traditionally appear at the end of a document. The Agency felt that this particular organization would emphasize or highlight the three separate listings of citations and would made this document easier to use.

PART 2: INDICES

DOCUMENT TYPE INDEX

Index entries in this Section are classified according to the following nine document types: health assessment, exposure assessment, source assessment, emission factors document, source sampling/ambient monitoring methodology, technical monitoring document, New Source Performance Standards (NSPS) background information document, National Emission Standards for Hazardous Air Pollutants (NESHAP) background information document, and Federal Register (FR) notice.

While there may be overlap between the kinds of information included in these nine categories, the document type identified for each report reflects the primary emphasis. In most cases, a document clearly fell into one of the nine categories, and thus the citation appears only once under that document type. In a few cases where it was difficult to select a single most appropriate document type, the citation is listed under all appropriate categories.

The entries are arranged by document type and then by NTIS order number or by Federal Register volume and page number. An asterisk denotes an entry new to this edition.

EMISSION FACTORS DOCUMENT

Compilation of Air Pollutant Emission Factors. Third Edition. Parts A and B (Including Supplements 1 through 7)
PB-275 525
Analysis of Residential Coal Stove Emissions
PB84-130442 *
Organic Emissions from Ferrous Metallurgical Industries: Compilation of Emission Factors and Control Technologies
PB84-141548 *
Gaseous Emissions from Excess Air Combustion of Explosives and Propellants
PB84-161421 *
Locating and Estimating Air Emissions from Sources of Acrylonitrile
PB84-200609 *
Locating and Estimating Air Emissions from Sources of Chloroform
PB84-200617 *
Locating and Estimating Air Emissions from Sources of Carbon Tetrachloride
PB84-200625 *
Locating and Estimating Air Emissions from Sources of Formaldehyde
PB84-200633 *
Locating and Estimating Air Emissions from Sources of Nickel
PB84-210988 *
Locating and Estimating Air Emissions from Sources of Ethylene Dichloride
PB84-239193 *

EXPOSURE ASSESSMENT

Source Assessment: Phthalic Anhydride (Air Emissions)
PB-266 797.
Assessment of Human Exposures to Atmospheric Benzene.
PB-284 203
Assessment of Human Exposures to Atmospheric Cadmium
PB80-153885
Chemical Hazard Information Profiles (CHIPs)
PB80-208788
Health Assessment Document for Cadmium
PB82-115163
Dioxins
PB82-136847
Health Assessment Document for Polycyclic Organic Matter
PB82-186792
Carcinogen Assessment Group's Final Report on Population Risk to Ambient Benzene Exposures
PB82-227372
Assessment of Human Exposures to Atmospheric Acrylonitrile
PB82-242256
Human Population Exposures to Coke-Oven Atmospheric Emissions
PB82-250234
Methods for Assessing Exposure to Windblown Particulates
PB83-177659
User's Guide for the Automated Inhalation Exposure Methodology (IEM).
PB83-187468
Hazardous Air Pollutant Prioritization System (HAPPS)
PB83-215657
Human Exposure to Atmospheric Concentrations of Selected Chemicals. Volume 2
PB83-265249
Human Exposure to Atmospheric Concentrations of Selected Chemicals. Volume 1
PB84-102540
Mini-Assessment: Total Exposure Assessment and Exposure-Dose Relationships
PB84-128032 *

HEALTH ASSESSMENT

Chemical Hazard Information Profiles (CHIPs)
PB80-208788
Health Assessment Document for Cadmium
PB82-115163
Dioxins
PB82-136847
Health Assessment Document for Polycyclic Organic Matter
PB82-186792
Health Assessment Document for Carbon Tetrachloride
PB83-129569
Health Assessment Document for Nickel. External Review Draft
PB83-213827
Hazardous Air Pollutant Prioritization System (HAPPS)
PB83-215657
Updated Mutagenicity and Carcinogenicity Assessment of Cadmium: Addendum to the Health Assessment Document for Cadmium (May 1981)
PB83-232280
Health Assessment Document for Toluene
PB84-100056
Health Assessment Document for 1,1,2-Trichloro-1,2,2-Trifluoroethane (Chlorofluorocarbon CFC-113)
PB84-118843
Health Assessment Document for Vinylidene Chloride. External Review Draft
PB84-126762
Mini-Assessment: Total Exposure Assessment and Exposure-Dose Relationships
PB84-128032 *
Health Assessment Document for Epichlorohydrin. External Review Draft
PB84-128669
Health Assessment Document for Acrylonitrile
PB84-149152 *
Health Assessment Document for Tetrachloroethylene (Perchloroethylene)
PB84-155803 *
Health Assessment Document for Dichloromethane (Methylene Chloride), External Review Draft
PB84-162643 *
Health Assessment Document for Trichloroethylene, External Review Draft
PB84-162882 *
Carcinogen Assessment of Coke Oven Emissions
PB84-170182 *
Draft Health Assessment Document for Hexachlorocyclopentadiene
PB84-182880 *
Health Assessment Document for 1,1,1-Trichloroethane (Methyl Chloroform)
PB84-183565 *
Draft Asbestos Health Assessment Update
PB84-186832 *
Health Assessment Document for Inorganic Arsenic
PB84-190891 *
Health Assessment Document for Chloroform: External Review Draft. Parts 1 and 2
PB84-195163 *
Health Assessment Document for 1,2-Dichloroethane (Ethylene Dichloride). External Review Draft. Parts 1 and 2
PB84-209865 *

Health Assessment Document for Ethylene Oxide. External Review Draft
PB84-209873 *
Health Assessment Document for Polychlorinated Dibenzo-p-Dioxins. Parts 1 and 2, External Review Draft
PB84-220268 *
Health Assessment Document for Chlorinated Benzenes. Parts 1 and 2, External Review Draft
PB84-220359 *
Health Assessment Document for Manganese
PB84-229954 *
Health Assessment Document for Chromium
PB85-115905 *

NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAP) BACKGROUND INFORMATION DOCUMENT

Background Information-Proposed National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, Mercury
PB-204 876
Background Information on Development of National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, and Mercury
PB-222 802
Background Information on National Emission Standards for Hazardous Air pollutants - Proposed Amendments to Standards for Asbestos and Mercury
PB-237 169
Background Information for Standards of Performance: Primary Aluminum Industry. Volume I: Proposed Standards
PB-237 612
Standard Support and Environmental Impact Statement. Volume 2. Promulgated Emission Standard for Vinyl Chloride
PB-258 827
Standards Support Document: Promulgated Amendments to the National Emission Standard for Asbestos
PB-283 661
Source Assessment: Coal-Fired Residential Combustion Equipment Field Tests, June 1977
PB-283 699
Benzene Emissions from the Ethylbenzene/Styrene Industry-Background Information for Proposed Standards
PB80-219686
Benzene Emissions from Benzene Storage Tanks - Background Information for Proposed Standards
PB81-151433
Benzene Fugitive Emissions - Background Information for Proposed Standards
PB81-151664
Preliminary Study of Sources of Inorganic Arsenic
PB83-153528
Background Information Document Proposed Standards for Radionuclides
PB83-192385
Inorganic Arsenic Emissions from High-Arsenic Primary Copper Smelters - Background Information for Proposed Standards
PB83-234120
Inorganic Arsenic Emissions from Low-Arsenic Primary Copper Smelters - Background Information for Proposed Standards
PB83-234138
Vinyl Chloride: A Review of National Emission Standards
PB84-114354
Inorganic Arsenic Emissions from Glass Manufacturing Plants: Background Information for Proposed Standards
PB84-152073 *
Benzene Emissions from Benzene Storage Tanks: Background Information for Proposal to Withdraw Proposed Standards
PB84-167683 *
Benzene Emissions from Maleic Anhydride Plants: Background Information for Proposal to Withdraw Proposed Standards
PB84-170174 *
Benzene Emissions from Ethylbenzene/Styrene Plants - Background Information for Proposal to Withdraw Proposed Standards
PB84-176874 *
Benzene Emissions from Coke By-Product Recovery Plants - Background Information for Proposed Standards
PB84-209477 *
Benzene Fugitive Emissions - Background Information for Promulgated Standards
PB84-210301 *

NEW SOURCE PERFORMANCE STANDARDS (NSPS) BACKGROUND INFORMATION DOCUMENT

Source Assessment: Background Information for Proposed New-Source Performance Standards: Steam Generators, Incinerators, Portland Cement Plants, Nitric Acid Plants, Sulfuric Acid Plants
PB-202 459
Source Assessment: Background Information for Proposed New Source Performance Standards: Asphalt Concrete Plants, Petroleum Refineries, Storage Vessels, Secondary Lead Smelters and Refineries, Brass or Bronze Ingot Production Plants, Iron and Steel Plants, Sewage Treatment Plants. Volume I. Main Text
PB-221 736
Background Information for Proposed New Source Performance Standards: Asphalt Concrete Plants, Petroleum Refineries, Storage Vessels, Secondary Lead Smelters and Refineries, Brass or Bronze Ingot Production Plants, Iron and Steel Plants, Sewage Treatment Plants. Volume 2. Appendix: Summaries of Test Data.
PB-229 660
Background Information for New Source Performance Standards: Asphalt Concrete Plants, Petroleum Refineries, Storage Vessels, Secondary Lead Smelters and Refineries, Brass and Bronze Ingot Production Plants, Iron and Steel Plants, and Sewage Treatment Plants. Volume 3. Promulgated Standards
PB-231 601
Background Information for Standards of Performance: Electric Submerged Arc Furnaces for Production of Ferroalloys. Volume I: Proposed Standards
PB-237 411
Background Information for Standards of Performance: Coal Preparation Plants, Volume I: Proposed Standards
PB-237 421
Background Information for Standards of Performance: Phosphate Fertilizer Industry. Volume 1. Proposed Standards
PB-237 606
Background Information for Standards of Performance: Phosphate Fertilizer Industry. Volume 2: Test Data Summary
PB-237 607
Background Information for Standards of Performance: Primary Aluminum Industry. Volume I: Proposed Standards
PB-237 612

Background Information for Standards of Performance: Primary Aluminum Industry. Volume I: Test Data Summary
PB-237 613
Background Information for Standards of Performance: Coal Preparation Plants. Volume 2. Summary and Test Data
PB-237 696
Background Information for New Source Performance Standards: Primary Copper, Zinc, and Lead Smelters. Volume 1: Proposed Standards.
PB-237 832
Background Information for Standards for Performance: Electric Arc Furnaces in the Steel Industry, Volume 1: Proposed Standards
PB-237 840
Background Information for Standards of Performance: Electric Arc Furnaces in the Steel Industry. Volume 2: Test Data Summary
PB-237 841
Background Information for Standards of Performance: Electric Submerged Arc Furnaces for Production of Ferroalloys. Volume 2: Test Data Summary
PB-238 077
Background Information for Standards of Performance: Primary Aluminum Industry. Volume 3: Supplemental Information
PB-250 667
Background Information for Standards of Performance: Coal Preparation Plants. Volume 3. Supplemental Information
PB-251 618
Background Information for Standards of Performance: Electric Submerged Arc Furnaces for Production of Ferroalloys. Volume 3: Supplemental Information
PB-252 031
Standards Support and Environmental Impact Statement Volume 1: Proposed Standards of Performance for Petroleum Refinery Sulfur Recovery Plants
PB-257 975
Standard Support and Environmental Impact Statement Volume 1: Proposed Standards of Performance for Kraft Pulp Mills
PB-258 007
Final Guideline Document: Control of Fluoride Emissions from Existing Phosphate Fertilizer Plants
PB-265 062
Background Information for an Opacity Standard of Performance for Basic Oxygen Process Furnaces in Iron and Steel Plants
PB-265 479
Standards Support and Environmental Impact Statement Volume 1: Proposed Standards of Performance for Lime Manufacturing Plants
PB-266 942
Standards Support and Environmental Impact Statement Volume I: Proposed Standards of Performance for Lignite-Fired Steam Generators
PB-267 610
Standards Support and Environmental Impact Statement Volume 1: Proposed Standards of Performance for Stationary Gas Turbines
PB-272 422
Final Guideline Document: Control of Sulfuric Acid Mist Emissions from Existing Sulfuric Acid Production Units
PB-274 085
Draft Guideline Document: Control of TRS Emissions from Existing Kraft Pulp Mills
PB-278 135
Standards Support and Environmental Impact Statement Volume II: Promulgated Standards of Performance for Kraft Pulp Mills
PB-278 160
Standards Support and Environmental Impact Statement Volume II: Promulgated Standards of Performance for Petroleum Refinery Sulfur Recovery Plants
PB-278 163
Standards Support and Environmental Impact Statement Volume 2. Promulgated Standards of Performance for Lignite-Fired Steam Generators
PB-279 008
Electric Utility Steam Generating Units: Background Information for Proposed NO_x Emission Standards
PB-286 155
Utility Steam Generating Units: Background Information for Proposed SO_2 Emission Standards
PB-286 159
Electric Utility Steam Generating Units - Particulate Matter, Background Information for Proposed Emission Standards
PB-286 224
Electric Utility Steam Generating Units - Background Information for Proposed SO_2 Emission Standards
PB-286 225
A Review of Standards of Performance for New Stationary Sources-Iron and Steel Plants/Basic Oxygen Furnaces
PB-289 877
A Review of Standards of Performance for New Stationary Sources-Sulfuric Acid Plants
PB-292 278
Primary Aluminum: Draft Guidelines for Control of Fluoride Emissions from Existing Primary Aluminum Plants
PB-294 938
A Review of Standards of Performance for New Stationary Sources - Nitric Acid Plants
PB-294 962
Kraft Pulping - Control of TRS Emissions from Existing Mills
PB-296 135
Source Assessment: A Review of Standards of Performance for New Stationary Sources - Asphalt Concrete Plants
PB-298 427
Electric Utility Steam Generating Units: Background Information for Promulgated Emission Standards
PB-298 510
Glass Manufacturing Plants, Background Information: Proposed Standards of Performance. Volume I
PB-298 528
A Review of Standards of Performance for New Stationary Sources - Petroleum Refineries
PB-300 480
A Review of Standards of Performance for New Stationary Sources - Portland Cement Industry
PB80-112089
Automobile and Light-Duty Truck Surface Coating Operations-Background Information for Proposed Standards
PB80-123540

A Review of Standards of Performance for New
Stationary Sources - Incinerators
PB80-124787
A Review of Standards of Performance for New
Stationary Sources - Sewage Sludge Incinerators
PB80-125446
Standard Support and Environmental Impact
Statement. Volume II: Promulgated Standards of
Performance for Stationary Gas Turbines
PB80-126022
Organic Solvent Cleaners - Background Information
for Proposed Standards
PB80-137912
Ammonium Sulfate Manufacture - Background
Information for Proposed Emission Standards
PB80-140163
Phosphate Rock Plants - Background Information for
Proposed Standards
PB80-141625
Primary Aluminum: Guidelines for Control of
Fluoride Emissions from Existing Primary Aluminum
Plants
PB80-153935
A Review of Standards of Performance for New
Stationary Sources - Secondary Lead Smelters
PB80-154065
Review of Standards of Performance for Electric
Arc Furnaces in Steel Industry
PB80-154602
Primary Aluminum - Background Information for
Promulgated Amendments
PB80-192479
Standards Support and Environmental Impact
Statement Volume 1: Proposed Standards of
Performance for Grain Elevator Industry
PB80-194152
Standards Support (Final) and Environmental Impact
Statement. Volume II: Promulgated Standards of
Performance for Lime Manufacturing Plants
PB80-194491
Standards Support and Environmental Impact
Statement. Volume 2: Promulgated Standards of
Performance for Grain Elevator Industry
PB80-198435
Electric Arc Furnaces in Ferrous Foundries -
Background Information for Proposed Standards
PB80-202997
Reference Method 24-Determination of Volatile
Matter Content, Water Content, Density, Volume
Solids, and Weight Solids of Surface Coatings.
Reference Method 25-Determination of Total Gaseous
Nonmethane Organic Emissions as Carbon. Background Information for Promulated Test Methods.
PB80-209778
Asphalt Roofing Manufacturing Industry -
Background Information for Proposed Standards.
PB80-212111
Sodium Carbonate Industry - Background Information
for Proposed Standards
PB80-219678
Perchloroethylene Dry Cleaners - Background
Information for Proposed Standards
PB81-100497
Pressure Sensitive Tape and Label Surface Coating
Industry - Background Information for Proposed
Standards
PB81-105942
Glass Manufacturing Plants - Background
Information for Promulgated Standards of
Performance
PB81-105967
Beverage Can Surface Coating Industry - Background
Information for Proposed Standards
PB81-113904
Automobile and Light-Duty Truck Surface Coating
Operations-Background Information for Promulgated
Standards
PB81-113920
Surface Coating of Metal Furniture - Background
Information for Proposed Standards
PB81-113938
Publication Rotogravure Printing - Background
Information for Proposed Standards
PB81-117145
Ammonium Sulfate Manufacture - Background
Information for Promulgated Emission Standards
PB81-118747
Review of New Source Performance Standards for
Phosphate Fertilizer Industry - Revised
PB81-122129
Metal Coil Surface Coating Industry - Background
Information for Proposed Standards
PB81-123572
VOC Fugitive Emissions in Synthetic Organic
Chemicals Manufacturing Industry - Background
Information for Proposed Standards
PB81-152167
Review of Standards of Performance for New
Stationary Sources - Ferroalloy Production
Facilities
PB81-157810
Industrial Surface Coating: Appliances -
Background Information for Proposed Standards
PB82-152174
A Review of Standards of Performance for New
Stationary Sources - Coal Preparation Plants
PB82-152851
Bulk Gasoline Terminals - Background Information
for Proposed Standards
PB82-152869
Phosphate Rock Plants - Background Information for
Promulgated Standards
PB82-200460
Lead-Acid Battery Manufacture - Background
Information for Promulgated Standards
PB82-202490
Fossil Fuel Fired Industrial Boilers - Background
Information. Volume 1: Chapters 1-9
PB82-202573 *
Fossil Fuel Fired Industrial Boilers - Background
Information. Volume 2: Appendices
PB82-202581 *
Nonfossil Fuel Fired Industrial Boilers: Background
Information
PB82-203209 *
Fugitive Emission Sources of Organic Compounds -
Additional Information on Emissions, Emission
Reductions, and Costs
PB82-217126
Primary Aluminum. Background Information:
Proposed Amendments
PB82-242611
Asphalt Roofing Manufacturing Industry -
Background Information for Promulgated Standards
PB82-257726
Stationary Internal Combustion Engines. Standards
Support and Environmental Impact Statement.
Volume I: Proposed Standards of Performance
PB83-113563
Metallic Mineral Processing Plants - Background
Information for Proposed Standards, Volume 1,
Chapters 1-9
PB83-113746

Metallic Mineral Processing Plants - Background Information for Proposed Standards. Volume 2: Appendices
PB83-114280 *
Metal Coil Surface Coating Industry - Background Information for Promulgated Standards
PB83-124867
Industrial Surface Coating: Large Appliances - Background Information for Promulgated Standards
PB83-124941
Surface Coating of Metal Furniture - Background Information for Promulgated Standards
PB83-136390
Publication Rotogravure Printing - Background Information for Promulgated Standards
PB83-142612
Synthetic Fiber Production Facilities - Background Information for Proposed Standards
PB83-153015
VOC (Volatile Organic Compounds) Fugitive Emissions in Petroleum Refining Industry - Background Information for Proposed Standards
PB83-157743
Rubber Tire Manufacturing Industry - Background Information for Proposed Standards
PB83-163543
Revised Standards for Basic Oxygen Process Furnaces: Background Information for Proposed Standards
PB83-166488
Flexible Vinyl Coating and Printing Operations - Background Information for Proposed Standards
PB83-169136
Bulk Gasoline Terminals: Background Information for Promulgated Standards
PB83-256206
Draft Environmental Impact Statement. Nonmetallic Mineral Processing Plants: Background Information for Proposed Standards
PB83-258103
Review of New Source Performance Standards for Petroleum Refinery Claus Sulfur Recovery Plants
PB84-101898 *
VOC Fugitive Emissions in Synthetic Organic Chemicals Manufacturing Industry - Background Information for Promulgated Standards
PB84-105311 *
Air Oxidation Processes in Synthetic Organic Chemical Manufacturing Industry - Background Information for Proposed Standards
PB84-114834
Beverage Can Surface Coating Industry--Background Information for Promulgated Standards of Performance
PB84-114859
Petroleum Dry Cleaners - Background Information for Proposed Standards
PB84-116045
Pressure Sensitive Tape and Label Surface Coating Industry - Background Information for Promulgated Standards
PB84-116748
Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels in the Steel Industry--Background Information for Proposed Revisions to Standards
PB84-120641
Draft Environmental Impact Statement Sulfur Oxides Emissions from Fluid Catalytic Cracking Unit Regenerators: Background Information for Proposed Standards
PB84-143254 *
SO2 Emissions in Natural Gas Production Standards: Background Information for Proposed Standards
PB84-151448 *
Equipment Leaks of VOC (Volatile Organic Compounds) in Natural Gas Production Industry - Background Information for Proposed Standards
PB84-155126 *
Wool Fiberglass Insulation Manufacturing Industry - Background Information for Proposed Standards
PB84-156264 *
Metallic Mineral Processing Plants - Background Information for Promulgated Standards
PB84-164060 *
Review of New Source Performance Standards for Grain Elevators
PB84-175744 *
Review of New Source Performance Standards for Primary Copper Smelters: Chapters 1 through 9
PB84-179951 *
Review of New Source Performance Standards for Primary Copper Smelters: Appendices
PB84-179969 *
Final Environmental Impact Statement Synthetic Fiber Production Facilities: Background Information Promulgated Standards
PB84-181825 *
Environmental Impact Statement for Lime Manufacturing Plants: Background Information for Promulgated Standards
PB84-191543 *
Distillation Operations in Synthetic Organic Chemical Manufacturing - Background Information for Proposed Standards
PB84-214006 *
VOC Emissions from Volatile Organic Liquid Storage Tanks - Background Information for Proposed Standards
PB84-237320 *
Petroleum Dry Cleaners - Background Information for Promulgated Standards
PB85-110567 *
Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels in Steel Plants--Background Information for Promulgated Standards of Performance
PB85-124204 *

SOURCE ASSESSMENT

Source Assessment: Prioritization of Air Pollution from Industrial Surface Coating Operations
PB-243 423
Source Assessment: Flat Glass Manufacturing Plants
PB-252 356
Source Assessment: Prioritization of Stationary Air Pollution Sources. Model Description
PB-253 479
Source Assessment: Fertilizer Mixing Plants
PB-253 992
Source Assessment: Severity of Stationary Air Pollution Sources - A Simulation Approach
PB-256 310
Source Assessment: Glass Container Manufacturing Plants
PB-262 002
Industrial Process Profiles for Environmental Use: Chapter 5. Basic Petrochemicals Industry
PB-266 224
Industrial Process Profiles for Environmental Use: Chapter 8. Pesticides Industry
PB-266 225
Industrial Process Profiles for Environmental Use: Chapter 24. The Iron and Steel Industry
PB-266 226

Industrial Process Profiles for Environmental Use: Chapter 1. Introduction
PB-266 274
Source Assessment: Phthalic Anhydride (Air Emissions)
PB-266 797
Source Assessment: Agricultural Opening Burning, State of the Art
PB-270 240
Source Assessment: Beef Cattle Feedlots
PB-270 282
Source Assessment: Noncriteria Pollutant Emissions
PB-270 550
Source Assessment: Mechanical Harvesting of Cotton - State of the Art
PB-271 486
Source Assessment: Harvesting of Grain - State of the Art
PB-271 697
Source Assessment: Acrylonitrile Manufacture (Air Emissions)
PB-271 969
Source Assessment: Ammonium Nitrate Production
PB-271 984
Source Assessment: Overview and Prioritization of Emissions from Textile Manufacturing
PB-271 986
Source Assessment: Defoliation of Cotton, State of the Art
PB-272 621
Source Assessment: Carbon Black Manufacture
PB-273 068
Industrial Process Profiles for Environmental Use: Chapter 3. Petroleum Refining Industry
PB-273 649
Source Assessment: Pressed and Blown Glass Manufacturing Plants
PB-273 786
Source Assessment: Urea Manufacture
PB-274 367
Compilation of Air Pollutant Emission Factors. Third Edition. Parts A and B (Including Supplements 1 through 7)
PB-275 525
Source Assessment: Synthetic Ammonia Production
PB-276 718
Source Assessment: Asphalt Hot Mix
PB-276 731
Source Assessment: Polychloroprene. State of the Art
PB-278 777
Destroying Chemical Wastes in Commercial Scale Incinerators
PB-278 816
Source Assessment: Pesticide Manufacturing Air Emissions - Overview and Prioritization
PB-279 171
Source Assessment: Cotton Gins
PB-280 024
Burning Waste Chlorinated Hydrocarbons in a Cement Kiln
PB-280 118
Source Assessment: Rail Tank Car, Tank Truck, and Drum Cleaning, State of the Art
PB-280 726
Source Assessment: Major Barium Chemicals
PB-280 756
Source Assessment: Plastics Processing, State of the Art
PB-280 926
Source Assessment: Crushed Limestone, State of the Art
PB-281 422
Source Assessment: Rubber Processing, State of the Art
PB-281 423
Industrial Process Profiles for Environmental Use: Chapter 4. Carbon Black Industry
PB-281 477
Industrial Process Profiles for Environmental Use: Chapter 6. The Industrial Organic Chemicals Industry
PB-281 478
Industrial Process Profiles for Environmental Use: Chapter 7. Organic Dyes and Pigments Industry
PB-281 479
Industrial Process Profiles for Environmental Use: Chapter 9. The Synthetic Rubber Industry
PB-281 480
Industrial Process Profiles for Environmental Use: Chapter 11. The Synthetic Fiber Industry
PB-281 481
Industrial Process Profiles for Environmental Use: Chapter 15. Brine and Evaporite Chemicals Industry
PB-281 482
Industrial Process Profiles for Environmental Use: Chapter 16. The Fluorocarbon-Hydrogen Fluoride Industry
PB-281 483
Industrial Process Profiles for Environmental Use: Chapter 17. The Gypsum and Wallboard Industry
PB-281 484
Industrial Process Profiles for Environmental Use: Chapter 18. The Lime Industry
PB-281 485
Industrial Process Profiles for Environmental Use: Chapter 19. The Clay Industry
PB-281 486
Industrial Process Profiles for Environmental Use: Chapter 20. The Mica Industry
PB-281 487
Industrial Process Profiles for Environmental Use: Chapter 21. The Cement Industry
PB-281 488
Industrial Process Profiles for Environmental Use: Chapter 22. The Phosphate Rock and Basic Fertilizer Materials Industry
PB-281 489
Industrial Process Profiles for Environmental Use: Chapter 23. Sulfur, Sulfur Oxides and Sulfuric Acid
PB-281 490
Industrial Process Profiles for Environmental Use: Chapter 25. Primary Aluminum Industry
PB-281 491
Industrial Process Profiles for Environmental Use: Chapter 26. Titanium Industry
PB-281 492
Source Assessment: Reclaiming of Waste Solvents, State of the Art
PB-282 934
Development of Information on Pesticides Manufacturing for Source Assessment
PB-283 051
Source Assessment: Polyvinyl Chloride
PB-283 395
Environmental Assessment: At-Sea and Land-Based Incineration of Organochlorine Wastes
PB-283 642
Source Assessment: Coal-Fired Residential Combustion Equipment Field Tests, June 1977
PB-283 699

Source Assessment: Crushed Stone
PB-284 029
Source Assessment: Coal Storage Piles
PB-284 297
Kepone Incineration Test Program
PB-285 000
Source Assessment: Crushed Sandstone, Quartz, and Quartzite, State of the Art
PB-285 210
Source Assessment: Chemical and Fertilizer Mineral Industry, State of the Art
PB-285 662
Source Assessment: Acrylic Acid Manufacture: State of the Art
PB-288 161
Source Assessment: Coal Refuse Piles, Abandoned Mines and Outcrops, State of the Art
PB-288 210
Source Assessment: Open Mining of Coal, State of the Art
PB-288 497
Source Assessment: Transport of Sand and Gravel
PB-289 788
Source Assessment: Charcoal Manufacturing, State of the Art.
PB-290 125
Source Assessment: Industrial Process Profiles for Environmental Use: Chapter 2. Oil and Gas Production Industry
PB-291 639
Industrial Process Profiles for Environmental Use: Chapter 10. Plastics and Resins Industry
PB-291 640
Industrial Process Profiles for Environmental Use. Chapter 12. The Explosives Industry
PB-291 641
Industrial Process Profiles for Environmental Use: Chapter 13, Plasticizers Industry
PB-291 642
Source Assessment: Noncriteria Pollutant Emissions (1978 Update)
PB-291 747
Source Assessment: Residential Combustion of Coal
PB-295 649
Source Assessment: Phosphate Fertilizer Industry
PB-300 681
Source Assessment: Solvent Evaporation - Degreasing Operations
PB80-128812
Source Assessment: Analysis of Uncertainty -- Principles and Applications
PB80-131485
Source Assessment: Chlorinated Hydrocarbons Manufacture
PB80-138209
Status Assessment of Toxic Chemicals
PB80-146293
Status Assessment of Toxic Chemicals: Acrylonitrile
PB80-146301
Status Assessment of Toxic Chemicals: Arsenic
PB80-146319
Status Assessment of Toxic Chemicals: Asbestos
PB80-146327
Status Assessment of Toxic Chemicals: Benzene
PB80-146335
Status Assessment of Toxic Chemicals: Benzidine
PB80-146343
Status Assessment of Toxic Chemicals: Cadmium
PB80-146350
Status Assessment of Toxic Chemicals: Hexachlorobenzene
PB80-146368
Status Assessment of Toxic Chemicals: Lead
PB80-146376
Status Assessment of Toxic Chemicals: Mercury
PB80-146384
Status Assessment of Toxic Chemicals: Phosphates
PB80-146392
Status Assessment of Toxic Chemicals: Polybrominated Biphenyls
PB80-146400
Status Assessment of Toxic Chemicals: Polynuclear Aromatic Hydrocarbons
PB80-146418
Status Assessment of Toxic Chemicals: Trichloroethylene
PB80-146426
Status Assessment of Toxic Chemicals: Tris(2,3-Dibromopropyl) Phosphate
PB80-146434
Status Assessment of Toxic Chemicals: Vinylidene Chloride
PB80-146442
Source Assessment: Manufacture of Acetone and Phenol from Cumene
PB80-150592
Source Assessment: Dry Bottom Industrial Boilers Firing Pulverized Bituminous Coal
PB80-177207
Source Assessment: Prescribed Burning, State of the Art
PB80-181472
Industrial Process Profiles for Environmental Use: Chapter 28. Primary Zinc Industry
PB80-225717
Source Assessment: Dry Bottom Utility Boilers Firing Pulverized Bituminous Coal
PB81-108078
Industrial Process Profiles for Environmental Use: Chapter 27. Primary Lead Industry
PB81-110926
Source Assessment: Residential Combustion of Wood
PB81-136160
Source Assessment: Cotton and Synthetic Woven Fabric Finishing
PB81-161937
Industrial Process Profiles for Environmental Use: Chapter 29. Primary Copper Industry
PB81-164915
Dioxins
PB82-136847
Technical Assistance in Support of Permitting Activities for the Thermal Destruction of PCBs
PB82-231325
PCB Disposal by Thermal Destruction
PB82-241860
Preliminary Study of Sources of Inorganic Arsenic
PB83-153528
Industrial Process Profiles for Environmental Use: Chapter 30. The Electronic Component Manufacturing Industry
PB83-199190
Preliminary Environmental Assessment on Formcoke Cokemaking Process
PB83-259713 *
Multimedia Environmental Assessment of Electric Submerged Arc Furnaces Producing Ferroalloys
PB83-262063 *
Exhaust Emissions from a Diesel Engine
PB84-122910 *
Environmental Assessment: Source Test and Evaluation Report - Rectisol Acid Gas Removal
PB84-153238 *

Profile of Existing Hazardous Waste Incineration Facilities and Manufacturers in the United States
PB84-157072 *

SOURCE SAMPLING/AMBIENT MONITORING METHODOLOGY

Methods for Determining the Polychlorinated Biphenyl Emissions from Incineration and Capacitor and Transformer Filling Plants
PB-276 745
Monitoring for Polychlorinated Biphenyl Emissions from an Electrolytic Capacitor Disposal Project
PB-284 378
Reference Method 24-Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings. Reference Method 25-Determination of Total Gaseous Nonmethane Organic Emissions as Carbon. Background Information for Promulated Test Methods.
PB80-209778
Potential Atmospheric Carcinogens, Phase 2/3: Analytical Technique and Field Evaluation
PB82-102476
Feasibility of Developing Source Sampling Methods for Asbestos Emissions
PB82-196148
Sampling for High-Molecular-Weight Organic Compounds in Power Plant Stack Gases
PB82-234618
Sampling Air for Gaseous Organic Chemicals Using Solid Adsorbents Applications to Tenax
PB82-262189
Method for Measuring Carbon Fiber Emissions from Stationary Sources
PB83-118760
Development of a Tunable Zeeman Spectrometer for Analysis of Toxic Organic Compounds
PB83-139535
Ambient Acrylonitrile Levels Near Major Acrylonitrile Production and Use Facilities
PB83-196154
Ohio River Valley Study. Sites, Methods, Data Summary for 1980, Volume 1. Main Report
PB83-212043
Ohio River Valley Study. Sites, Methods, Data Summary for 1980. Volume 2. Appendices
PB83-212050
Field Validation of EPA (Environmental Protection Agency) Reference Method 23
PB83-214551
Technical Assistance Document for Sampling and Analysis of Toxic Organic Compounds in Ambient Air
PB83-239020
Analysis of Residential Coal Stove Emissions
PB84-130442 *
Comprehensive Assessment of the Specific Compounds Present in Combustion Processes. Volume 1. Pilot Study of Combustion Emissions Variability
PB84-140870 *
Relative Airborne Losses of Commercial 2,4-D Formulations from a Simulated Wheat Field
PB84-142322 *
Ambient Concentrations of Polycyclic Organic Matter
PB84-144146 *
Survey of Direct Analysis Methods for Organic Compounds in Particulate Matter
PB84-154723 *
Sampling and Analysis Methods for Hazardous Waste Combustion
PB84-155845 *
Literature Review on Occurrence and Methodology for Determination of Nickel, Chromium, Manganese, and Arsenic Species in Air
PB84-172105 *
Laboratory Evaluation of Tunable Atomic Line Molecular Spectrometers for Benzene Analysis
PB84-177765 *
Analysis of Polynuclear Aromatic Hydrocarbons in Particulate Matter by Luminescence Techniques
PB84-181882 *
Method for Collection and Analysis of Chlorobenzenes
PB84-189646 *
Passive Sampling Device for Ambient Air and Personal Monitoring
PB84-210046 *
Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air
PB (Pending. See page 93.) *

TECHNICAL MONITORING DOCUMENT

Measurements of Hazardous Organic Chemicals in the Ambient Atmosphere
PB83-156935
Volatile Organic Compounds in the Ambient Atmosphere of the New Jersey, New York Area
PB83-191403
Volatile Organic Chemicals in the Atmosphere: An Assessment of Available Data
PB83-195503
Volatile Organic Chemicals in the Atmosphere: An Assessment of Available Data
PB83-195511
Ohio River Valley Study. Sites, Methods, Data Summary for 1980, Volume 1. Main Report
PB83-212043
Ohio River Valley Study. Sites, Methods, Data Summary for 1980. Volume 2. Appendices
PB83-212050
Air Quality Data for Metals 1977 through 1979 from the National Air Surveillance Networks
PB84-110535 *
Emission Characterization of Major Fossil Fuel Power Plants in the Ohio River Valley
PB84-120328 *
Ambient Concentrations of Polycyclic Organic Matter
PB84-144146 *
Compilation of Air Toxic and Trace Metal Summary Statistics
PB84-245273 *

FEDERAL REGISTER NOTICE

National Emission Standards for Hazardous Air Pollutants, Proposed Standards for Asbestos, Beryllium, and Mercury
36 FR 23239 (Dec 7, 1971) *
National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, and Mercury
38 FR 8820 (Apr 6, 1973) *
Asbestos and Mercury, Proposed Admendments to National Emission Standards for Hazardous Air Pollutants
39 FR 38064 (Oct 25, 1974) *
National Emission Standards for Hazardous Air Pollutants, Amendments to Standards for Asbestos and Mercury
40 FR 48299 (Oct 14, 1975) *
National Emission Standards for Hazardous Air Pollutants, Proposed Standard for Vinyl Chloride
40 FR 59532 (Dec 24, 1975) *
Phosphate Fertilizer Plants
41 FR 19585 (May 12, 1976) *
National Emission Standards for Hazardous Air Pollutants, Standard for Vinyl Chloride
41 FR 46561 (Oct 21, 1976) *

Standards of Performance for New Stationary Sources, Emission Guidelines for the Control of Sulfuric Acid Mist from Existing Sulfuric Acid Production Units
41 FR 48706 (Nov 4, 1976) *
Phosphate Fertilizer Plants
42 FR 12022 (Mar 1, 1977) *
National Emission Standard for Hazardous Air Pollutants, Proposed Amendments to Asbestos Standard
42 FR 12122 (Mar 2, 1977) *
National Emission Standards for Hazardous Air Pollutants: Vinyl Chloride
42 FR 28154 (Jun 2, 1977) *
Standards of Performance for New Stationary Sources, Emission Guideline for Sulfuric Acid Mist
42 FR 55796 (Oct 18, 1977) *
Kraft Pulp Mills, Draft Guideline Document: Availability
43 FR 7597 (Feb 23, 1978) *
National Emission Standards for Hazardous Air Pollutants, Amendments to Asbestos Standard
43 FR 26372 (Jun 19, 1978) *
Primary Aluminum Plants; Draft Guideline Document; Availability
44 FR 21754 (Apr 11, 1979) *
Kraft Pulp Mills, Final Guideline Document; Availability
44 FR 29828 (May 22, 1979) *
Primary Aluminum Plants; Availability of Final Guideline Document
45 FR 26294 (Apr 17, 1980) *
National Emission Standard for Hazardous Air Pollutants; Benzene Emissions from Maleic Anhydride Plants
45 FR 26660 (Apr 18, 1980) *
National Emissions Standards for Hazardous Air Pollutants; Benzene Emissions from Ethylbenzene/Styrene Plants; Public Hearing.
45 FR 83448 (Dec 18, 1980) *
Benzene Emissions from Benzene Storage Vessels; National Emission Standard for Hazardous Air Pollutants; Hearing
45 FR 83952 (Dec 19, 1980) *
National Emission Standard for Hazardous Air Pollutants; Benzene Fugitive Emissions
46 FR 1165 (Jan 5, 1981) *
National Emission Standards for Hazardous Air Pollutants; Benzene Emissions from Benzene Storage Vessels
47 FR 53059 (Nov 24, 1982) *
National Emission Standards for Hazardous Air Pollutants; Standards for Radionuclides
48 FR 15076 (Apr 6, 1983) *
National Emission Standards for Hazardous Air Pollutants; Amendments to Asbestos Standard
48 FR 32126 (Jul 13, 1983) *
National Emission Standards for Hazardous Air Pollutants; Proposed Standards for Inorganic Arsenic
48 FR 33112 (Jul 20, 1983) *
National Emission Standards for Hazardous Air Pollutants; Proposed Standards for Inorganic Arsenic
48 FR 55880 (Dec 16, 1983) *
National Emission Standards for Hazardous Air Pollutants; Benzene Emissions from Maleic Anhydride Plants, Ethylbenzene/Styrene Plants, and Benzene Storage Vessels; Proposed Withdrawal of Proposed Standards
49 FR 8386 (Mar 6, 1984) *
National Emission Standards for Hazardous Air Pollutants; Proposed Standards for Inorganic Arsenic
49 FR 10278 (Mar 20, 1984) *
National Emission Standards for Hazardous Air Pollutants; Amendments to Asbestos Standard
49 FR 13658 (Apr 5, 1984) *
National Emission Standards for Hazardous Air Pollutants; Regulation of Benzene
49 FR 23478 (Jun 6, 1984) *
National Emission Standards for Hazardous Air Pollutants; Proposed Standards for Benzene Emissions from Coke By-Product Recovery Plants
49 FR 23522 (Jun 6, 1984) *
National Emission Standards for Hazardous Air Pollutants; Regulation of Radionuclides
49 FR 43906 (Oct 31, 1984) *
National Emission Standards for Hazardous Air Pollutants; Standards for Radon-222 Emissions from Underground Uranium Mines
49 FR 43915 (Oct 31, 1984) *
National Emission Standards for Hazardous Air Pollutants; Standards for Radon-222 Emissions from Licensed Uranium Mills
49 FR 43916 (Oct 31, 1984) *
Proposed Guidelines for Carcinogen Risk Assessment
49 FR 46294 (Nov 23, 1984) *
Proposed Guidelines for Exposure Assessment
49 FR 46304 (Nov 23, 1984) *
Proposed Guidelines for Mutagenicity Risk Assessment
49 FR 46314 (Nov 23, 1984) *
Proposed Guidelines for the Health Assessment of Suspect Developmental Toxicants
49 FR 46324 (Nov 23, 1984) *

POLLUTANT NAME/CLASS INDEX

The indexing terms for each EPA report entry were assigned from the report abstract, which was taken from the EPA Publications Bibliography, the NTIS data base, or in some cases, the technical data sheet located in the report itself. The indexing terms for each Federal Register entry were obtained from the Summary and Supplementary Information section of each notice.

The entries in this section are classified under the most specific pollutant or chemical name indicated in the abstract. No attempt was made to list synonyms. When the abstract discusses numerous chemicals or pollutants, and it is not possible because of space limitations to list them all, or when the abstract only discusses the pollutants in a generic way, a generic term, such as "organic compounds," is used.

The entries are arranged by pollutant and then by NTIS order number or by Federal Register volume and page number. An asterisk denotes an entry new to this edition.

ACETALDEHYDE
- Source Assessment: Acrylic Acid Manufacture: State of the Art
- PB-288 161

ACETIC ACID
- Source Assessment: Acrylic Acid Manufacture: State of the Art
- PB-288 161

ACETONE ACROLEIN
- Source Assessment: Acrylic Acid Manufacture: State of the Art
- PB-288 161

ACIDS
- Source Assessment: Pesticide Manufacturing Air Emissions - Overview and Prioritization
- PB-279 171
- Environmental Assessment: Source Test and Evaluation Report - Rectisol Acid Gas Removal
- PB84-153238 *

ACRYLIC ACID
- Source Assessment: Acrylic Acid Manufacture: State of the Art
- PB-288 161

ACRYLONITRILE
- Status Assessment of Toxic Chemicals: Acrylonitrile
- PB80-146301
- Human Exposure to Atmospheric Concentrations of Selected Chemicals
- PB81-193278
- Assessment of Human Exposures to Atmospheric Acrylonitrile
- PB82-242256
- Ambient Acrylonitrile Levels Near Major Acrylonitrile Production and Use Facilities
- PB83-196154
- Health Assessment Document for Acrylonitrile
- PB84-149152 *
- Locating and Estimating Air Emissions from Sources of Acrylonitrile
- PB84-200609 *

AEROSOLS
- Ohio River Valley Study. Sites, Methods, Data Summary for 1980. Volume 2. Appendices
- PB83-212050

ALDEHYDES
- Source Assessment: Asphalt Hot Mix
- PB-276 731

ALKALI SULFATES
- Source Assessment: Flat Glass Manufacturing Plants
- PB-252 356

AMINES
- Source Assessment: Pesticide Manufacturing Air Emissions - Overview and Prioritization
- PB-279 171

AMMONIA
- Source Assessment: Fertilizer Mixing Plants
- PB-253 992
- Source Assessment: Beef Cattle Feedlots
- PB-270 282
- Source Assessment: Ammonium Nitrate Production
- PB-271 984
- Source Assessment: Synthetic Ammonia Production
- PB-276 718
- Source Assessment: Coal Refuse Piles, Abandoned Mines and Outcrops, State of the Art
- PB-288 210
- Source Assessment: Phosphate Fertilizer Industry
- PB-300 681

ANILIDES
- Development of Information on Pesticides Manufacturing for Source Assessment
- PB-283 051

ARSENIC
- Compilation of Air Toxic and Trace Metal Summary Statistics
- PB84-245273 *

ARSENIC (INORGANIC)
- Preliminary Study of Sources of Inorganic Arsenic
- PB83-153528
- Inorganic Arsenic Emissions from High-Arsenic Primary Copper Smelters - Background Information for Proposed Standards
- PB83-234120
- Inorganic Arsenic Emissions from Low-Arsenic Primary Copper Smelters - Background Information for Proposed Standards
- PB83-234138
- Inorganic Arsenic Emissions from High-Arsenic Primary Copper Smelters - Background Information for Proposed Standards
- PB83-234120
- Inorganic Arsenic Emissions from Low-Arsenic Primary Copper Smelters - Background Information for Proposed Standards
- PB83-234138
- Inorganic Arsenic Emissions from Glass Manufacturing Plants: Background Information for Proposed Standards
- PB84-152073 *
- Literature Review on Occurrence and Methodology for Determination of Nickel, Chromium, Manganese, and Arsenic Species in Air
- PB84-172105 *
- Health Assessment Document for Inorganic Arsenic
- PB84-190891 *
- National Emission Standards for Hazardous Air Pollutants; Proposed Standards for Inorganic Arsenic
- 48 FR 33112 (Jul 20, 1983) *
- National Emission Standards for Hazardous Air Pollutants; Proposed Standards for Inorganic Arsenic
- 48 FR 55880 (December 16, 1983) *
- National Emission Standards for Hazardous Air Pollutants; Proposed Standards for Inorganic Arsenic
- 49 FR 10278 (Mar 20, 1984) *

ARSENIC ACID
- Source Assessment: Defoliation of Cotton, State of the Art
- PB-272 621

ASBESTOS
- Background Information-Proposed National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, Mercury
- PB-204 876
- Background Information on Development of National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, and Mercury
- PB-222 802
- Background Information on National Emission Standards for Hazardous Air pollutants - Proposed Amendments to Standards for Asbestos and Mercury
- PB-237 169
- Standards Support Document: Promulgated Amendments to the National Emission Standard for Asbestos
- PB-283 661
- Status Assessment of Toxic Chemicals: Asbestos
- PB80-146327
- Feasibility of Developing Source Sampling Methods for Asbestos Emissions
- PB82-196148
- Draft Asbestos Health Assessment Update
- PB84-186832 *

National Emission Standards for Hazardous Air Pollutants, Proposed Standards for Asbestos, Beryllium, and Mercury
36 FR 23239 (Dec 7, 1971) *
National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, and Mercury
38 FR 8820 (Apr 6, 1973) *
Asbestos and Mercury, Proposed Amendments to National Emission Standards for Hazardous Air Pollutants
39 FR 38064 (Oct 25, 1974) *
National Emission Standards for Hazardous Air Pollutants, Amendment to Standards for Asbestos and Mercury
40 FR 48299 (Oct 14, 1975) *
National Emission Standard for Hazardous Air Pollutants, Proposed Amendments to Asbestos Standard
42 FR 12122 (Mar 2, 1977) *
National Emission Standards for Hazardous Air Pollutants, Amendments to Asbestos Standard
43 FR 26372 (Jun 19, 1978) *
National Emission Standards for Hazardous Air Pollutants; Amendments to Asbestos Standard
48 FR 32126 (Jul 13, 1983) *
National Emission Standards for Hazardous Air Pollutants; Amendments to Asbestos Standard
49 FR 13658 (Apr 5, 1984) *

BARIUM

Source Assessment: Major Barium Chemicals
PB-280 756

BERYLLIUM

Background Information-Proposed National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, Mercury
PB-204 876
Background Information on Development of National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, and Mercury
PB-222 802

BENZENE

Destroying Chemical Wastes in Commercial Scale Incinerators
PB-278 816
Assessment of Human Exposures to Atmospheric Benzene
PB-284 203
Source Assessment: Acrylic Acid Manufacture: State of the Art
PB-288 161
Status Assessment of Toxic Chemicals: Benzene
PB80-146335
Benzene Emissions from Maleic Anhydride Industry - Background Information for Proposed Standards
PB80-152812
Benzene Emissions from the Ethylbenzene/Styrene Industry-Background Information for Proposed Standards
PB80-219686
Benzene Emissions from Benzene Storage Tanks - Background Information for Proposed Standards
PB81-151433
Benzene Fugitive Emissions - Background Information for Proposed Standards
PB81-151664
Carcinogen Assessment Group's Final Report on Population Risk to Ambient Benzene Exposures
PB82-227372
Development of a Tunable Zeeman Spectrometer for Analysis of Toxic Organic Compounds
PB83-139535
Volatile Organic Compounds in the Ambient Atmosphere of the New Jersey, New York Area
PB83-191403
Compilation of Air Toxic and Trace Metal Summary Statistics
PB84-245273 *
Benzene Emissions from Benzene Storage Tanks: Background Information for Proposal to Withdraw Proposed Standards
PB84-167683 *
Benzene Emissions from Maleic Anhydride Plants: Background Information for Proposal to Withdraw Proposed Standards
PB84-170174 *
Benzene Emissions from Ethylbenzene/Styrene Plants - Background Information for Proposal to Withdraw Proposed Standards
PB84-176874 *
Laboratory Evaluation of Tunable Atomic Line Molecular Spectrometers for Benzene Analysis
PB84-177765 *
Benzene Emissions from Coke By-Product Recovery Plants - Background Information for Proposed Standards
PB84-209477 *
Benzene Fugitive Emissions - Background Information for Promulgated Standards
PB84-210301 *
National Emission Standard for Hazardous Air Pollutants; Benzene Emissions from Maleic Anhydride Plants
45 FR 26660 (Apr 18, 1980) *
National Emissions Standards for Hazardous Air Pollutants; Benzene Emissions from Ethylbenzene/Styrene Plants; Public Hearing
45 FR 83448 (Dec 18, 1980) *
Benzene Emissions from Benzene Storage Vessels; National Emission Standard for Hazardous Air Pollutants; Hearing
45 FR 83952 (Dec 19, 1980) *
National Emission Standard for Hazardous Air Pollutants; Benzene Fugitive Emissions
46 FR 1165 (Jan 5, 1981) *
National Emission Standards for Hazardous Air Pollutants; Benzene Emissions from Benzene Storage Vessels
47 FR 53059 (Nov 24, 1982) *
National Emission Standards for Hazardous Air Pollutants; Benzene Emissions from Maleic Anhydride Plants, Ethylbenzene/Styrene Plants, and Benzene Storage Vessels; Proposed Withdrawal of Proposed Standards
49 FR 8386 (Mar 6, 1984) *
National Emission Standards for Hazardous Air Pollutants; Regulation of Benzene
49 FR 23478 (Jun 6, 1984) *
National Emission Standards for Hazardous Air Pollutants; Proposed Standards for Benzene Emissions from Coke By-Product Recovery Plants
49 FR 23522 (Jun 6, 1984) *

BENZIDINE

Status Assessment of Toxic Chemicals: Benzidine
PB80-146343

BENZO(A)PYRENE

Human Population Exposures to Coke-Oven Atmospheric Emissions
PB82-250234
Compilation of Air Toxic and Trace Metal Summary Statistics
PB84-245273 *

BERYLLIUM
National Emission Standards for Hazardous Air Pollutants, Proposed Standards for Asbestos, Beryllium, and Mercury
36 FR 23239 (Dec 7, 1971) *
National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, and Mercury
38 FR 8820 (Apr 6, 1973) *

BUTADIENE
Source Assessment: Rubber Processing, State of the Art
PB-281 423

CADMIUM
Status Assessment of Toxic Chemicals: Cadmium
PB80-146350
Assessment of Human Exposures to Atmospheric Cadmium
PB80-153885
Thermal Conversion of Municipal Wastewater Sludge, Phase II: Study of Heavy Metal Emissions
PB82-111816
Health Assessment Document for Cadmium
PB82-115163
Updated Mutagenicity and Carcinogenicity Assessment of Cadmium: Addendum to the Health Assessment Document for Cadmium (May 1981)
PB83-232280
Comprehensive Assessment of the Specific Compounds Present in Combustion Processes. Volume 1. Pilot Study of Combustion Emissions Variability
PB84-140870 *

CARBON BLACK
Source Assessment: Carbon Black Manufacture
PB-273 068
Source Assessment: Rubber Processing, State of the Art
PB-281 423

CARBON DISULFIDE
Source Assessment: Pesticide Manufacturing Air Emissions - Overview and Prioritization
PB-279 171

CARBON FIBERS
Method for Measuring Carbon Fiber Emissions from Stationary Sources
PB83-118760

CARBON TETRACHLORIDE
Source Assessment: Chlorinated Hydrocarbons Manufacture
PB80-138209
Health Assessment Document for Carbon Tetrachloride
PB83-129569
Locating and Estimating Air Emissions from Sources of Carbon Tetrachloride
PB84-200625 *

CHLORINE
Source Assessment: Fertilizer Mixing Plants
PB-253 992

CHLOROBENZENES
Development of a Tunable Zeeman Spectrometer for Analysis of Toxic Organic Compounds
PB83-139535
Method for Collection and Analysis of Chlorobenzenes
PB84-189646 *
Health Assessment Document for Chlorinated Benzenes. Parts 1 and 2, External Review Draft
PB84-220359 *

CHLOROETHANES
Source Assessment: Chlorinated Hydrocarbons Manufacture
PB80-138209

CHLOROFORM
Source Assessment: Chlorinated Hydrocarbons Manufacture
PB80-138209
Health Assessment Document for Chloroform: External Review Draft. Parts 1 and 2
PB84-195163 *
Locating and Estimating Air Emissions from Sources of Chloroform
PB84-200617 *

CHLOROFLUOROCARBON
Health Assessment Document for 1,1,2-Trichloro-1,2,2-Trifluoroethane (Chlorofluorocarbon CFC-113)
PB84-118843

CHLOROMETHANES
Source Assessment: Chlorinated Hydrocarbons Manufacture
PB80-138209

CHLOROPRENE
Source Assessment: Polychloroprene. State of the Art
PB-278 777

CHLOROTOLUENE
Burning Waste Chlorinated Hydrocarbons in a Cement Kiln
PB-280 118

CHROMIUM
Determination of Nickel, Chromium, Manganese, and Arsenic Species in Air
PB84-172105 *
Health Assessment Document for Chromium
PB85-115905 *

COKE OVEN EMISSIONS
Carcinogen Assessment of Coke Oven Emissions
PB84-170182

DEF-6
Source Assessment: Defoliation of Cotton, State of the Art
PB-272 621

1,2-DICHLOROETHANE
Health Assessment Document for 1,2-Dichloroethane (Ethylene Dichloride). External Review Draft. Parts 1 and 2
PB84-209865 *

DICHLOROMETHANE
Health Assessment Document for Dichloromethane (Methylene Chloride), External Review Draft
PB84-162643 *

2,4-DICHLOROPHENOXYACETIC ACID
Relative Airborne Losses of Commercial 2,4-D Formulations from a Simulated Wheat Field
PB84-142322 *

DIENES
Development of Information on Pesticides Manufacturing for Source Assessment
PB-283 051

DIOXINS
Dioxins
PB82-136847
Health Assessment Document for Polychlorinated Dibenzo-p-Dioxins. Parts 1 and 2, External Review Draft
PB84-220268 *

EPICHLOROHYDRIN
Source Assessment: Chlorinated Hydrocarbons Manufacture
PB80-138209
Health Assessment Document for Epichlorohydrin. External Review Draft
PB84-128669

ETHYLENE
Destroying Chemical Wastes in Commercial Scale Incinerators
PB-278 816

ETHYLENE DICHLORIDE
Standard Support and Environmental Impact Statement: Emission Standard for Vinyl Chloride
PB-249 703
Standard Support and Environmental Impact Statement. Volume 2. Promulgated Emission Standard for Vinyl Chloride
PB-258 827
Burning Waste Chlorinated Hydrocarbons in a Cement Kiln
PB-280 118
Vinyl Chloride: A Review of National Emission Standards
PB84-114354
Health Assessment Document for 1,2-Dichloroethane (Ethylene Dichloride). External Review Draft. Parts 1 and 2
PB84-209865 *
Locating and Estimating Air Emissions from Sources of Ethylene Dichloride
PB84-239193 *

ETHYLENE OXIDE
Health Assessment Document for Ethylene Oxide. External Review Draft
PB84-209873 *

FLUORIDES
Final Guideline Document: Control of Fluoride Emissions from Existing Phosphate Fertilizer Plants
PB-265 062
Source Assessment: Pressed and Blown Glass Manufacturing Plants
PB-273 788
Primary Aluminum: Draft Guidelines for Control of Fluoride Emissions from Existing Primary Aluminum Plants
PB-294 938
Source Assessment: Phosphate Fertilizer Industry
PB-300 681
Primary Aluminum: Guidelines for Control of Fluoride Emissions from Existing Primary Aluminum Plants
PB80-153935
Review of New Source Performance Standards for Phosphate Fertilizer Industry - Revised
PB81-122129
Primary Aluminum Plants; Draft Guideline Document; Availability
44 FR 21754 (Apr 11, 1979) *
Primary Aluminum Plants; Availability of Final Guideline Document
45 FR 26294 (Apr 17, 1980) *

FLUORINE
Source Assessment: Fertilizer Mixing Plants
PB-253 992

FOLEX
Source Assessment: Prioritization of Stationary Air Pollution Sources. Model Description
PB-253 479

FORMALDEHYDE
Locating and Estimating Air Emissions from Sources of Formaldehyde
PB84-200633 *

GYPSUM
Source Assessment: Beef Cattle Feedlots
PB-270 282
Industrial Process Profiles for Environmental Use: Chapter 17. The Gypsum and Wallboard Industry
PB-281 484

HEAVY METALS
Thermal Conversion of Municipal Wastewater Sludge, Phase II: Study of Heavy Metal Emissions
PB82-111816

HEXACHLOROBENZENE
Status Assessment of Toxic Chemicals: Hexachlorobenzene
PB80-146368

HEXACHLOROCYCLOPENTADIENE
Destroying Chemical Wastes in Commercial Scale Incinerators
PB-278 816
Source Assessment: Pesticide Manufacturing Air Emissions - Overview and Prioritization
PB-279 171
Draft Health Assessment Document for Hexachlorocyclopentadiene
PB84-182880 *

HYDROGEN CHLORIDE
Source Assessment: Polychloroprene. State of the Art
PB-278 777

HYDROGEN CYANIDE
Source Assessment: Pesticide Manufacturing Air Emissions - Overview and Prioritization
PB-279 171

HYDROGEN SULFIDE
Source Assessment: Carbon Black Manufacture
PB-273 068
Source Assessment: Coal Refuse Piles, Abandoned Mines and Outcrops, State of the Art
PB-288 210

INORGANIC COMPOUNDS
Source Assessment: Noncriteria Pollutant Emissions
PB-270 550
Source Assessment: Noncriteria Pollutant Emissions (1978 Update)
PB-291 747

KEPONE
Kepone Incineration Test Program
PB-285 000

LEAD
Status Assessment of Toxic Chemicals: Lead
PB80-146376
Thermal Conversion of Municipal Wastewater Sludge, Phase II: Study of Heavy Metal Emissions
PB82-111816

MANGANESE
Determination of Nickel, Chromium, Manganese, and Arsenic Species in Air
PB84-172105 *
Health Assessment Document for Manganese
PB84-229954 *

MERCURY
Background Information-Proposed National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, Mercury
PB-204 876
Background Information on Development of National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, and Mercury
PB-222 802
Background Information on National Emission Standards for Hazardous Air pollutants - Proposed Amendments to Standards for Asbestos and Mercury
PB-237 169
Status Assessment of Toxic Chemicals: Mercury
Descriptors: Source assessment, Mercury, Chemical industry
PB80-146384
National Emission Standards for Hazardous Air Pollutants, Proposed Standards for Asbestos, Beryllium, and Mercury
36 FR 23239 (Dec 7, 1971) *
National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, and Mercury
38 FR 8820 (Apr 6, 1973) *

Asbestos and Mercury, Proposed Admendments to National Emission Standards for Hazardous Air Pollutants
39 FR 38064 (Oct 25, 1974) *
National Emission Standards for Hazardous Air Pollutants, Amendments to Standards for Asbestos and Mercury
40 FR 48299 (Oct 14, 1975) *

METALS
Air Quality Data for Metals 1977 through 1979 from the National Air Surveillance Networks
PB84-110535 *
Compilation of Air Toxic and Trace Metal Summary Statistics
PB84-245273 *

METHANE
Source Assessment: Open Mining of Coal, State of the Art
PB-288 497

METHYL CHLOROFORM
Health Assessment Document for 1,1,1-Trichloroethane (Methyl Chloroform)
PB84-183565 *

METHYL METHACRYLATE
Destroying Chemical Wastes in Commercial Scale Incinerators
PB-278 816

METHYLENE CHLORIDE
Source Assessment: Solvent Evaporation - Degreasing Operations
PB80-128812
Organic Solvent Cleaners - Background Information for Proposed Standards
PB80-137912
Health Assessment Document for Dichloromethane (Methylene Chloride), External Review Draft
PB84-162643 *

MINERAL SULFATES
Source Assessment: Glass Container Manufacturing Plants
PB-262 002
Source Assessment: Pressed and Blown Glass Manufacturing Plants
PB-273 788

NICKEL
Health Assessment Document for Nickel. External Review Draft
PB83-213827
Determination of Nickel, Chromium, Manganese, and Arsenic Species in Air
PB84-172105 *
Locating and Estimating Air Emissions from Sources of Nickel
PB84-210988 *

NITROBENZENE
Destroying Chemical Wastes in Commercial Scale Incinerators
PB-278 816

NITROGEN COMPOUNDS
Ohio River Valley Study. Sites, Methods, Data Summary for 1980. Volume 2. Appendices
PB83-212050

ORGANIC COMPOUNDS
Source Assessment: Noncriteria Pollutant Emissions
PB-270 550
Source Assessment: Defoliation of Cotton, State of the Art
PB-272 621
Destroying Chemical Wastes in Commercial Scale Incinerators
PB-278 816
Source Assessment: Pesticide Manufacturing Air Emissions - Overview and Prioritization
PB-279 171
Source Assessment: Rail Tank Car, Tank Truck, and Drum Cleaning, State of the Art
PB-280 726
Development of Information on Pesticides Manufacturing for Source Assessment
PB-283 051
Environmental Assessment: At-Sea and Land-Based Incineration of Organochlorine Wastes
PB-283 642
Source Assessment: Coal-Fired Residential Combustion Equipment Field Tests, June 1977
PB-283 699
Source Assessment: Noncriteria Pollutant Emissions (1978 Update)
PB-291 747
Chemical Hazard Information Profiles (CHIPs)
PB80-208768
Reference Method 24-Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings. Reference Method 25-Determination of Total Gaseous Nonmethane Organic Emissions as Carbon. Background Information for Promulated Test Methods.
PB80-209778
Sampling for High-Molecular-Weight Organic Compounds in Power Plant Stack Gases
PB82-234618
Human Population Exposures to Coke-Oven Atmospheric Emissions
PB82-250234
Sampling Air for Gaseous Organic Chemicals Using Solid Adsorbents Applications to Tenax
PB82-262189
Development of a Tunable Zeeman Spectrometer for Analysis of Toxic Organic Compounds
PB83-139535
Measurements of Hazardous Organic Chemicals in the Ambient Atmosphere
PB83-156935
Volatile Organic Compounds in the Ambient Atmosphere of the New Jersey, New York Area
PB83-191403
Volatile Organic Compounds in the Ambient Atmosphere of the New Jersey, New York Area
PB83-191403
Volatile Organic Chemicals in the Atmosphere: An Assessment of Available Data
PB83-195503
Volatile Organic Chemicals in the Atmosphere: An Assessment of Available Data
PB83-195511
Field Validation of EPA (Environmental Protection Agency) Reference Method 23
PB83-214551
Technical Assistance Document for Sampling and Analysis of Toxic Organic Compounds in Ambient Air
PB83-239020
Multimedia Environmental Assessment of Electric Submerged Arc Furnaces Producing Ferroalloys
PB83-262063 *
Human Exposure to Atmospheric Concentrations of Selected Chemicals. Volume 2
PB83-265249
Human Exposure to Atmospheric Concentrations of Selected Chemicals. Volume 1
PB84-102540
VOC Fugitive Emissions in Synthetic Organic Chemicals Manufacturing Industry - Background Information for Promulgated Standards
PB84-105311 *

Exhaust Emissions from a Diesel Engine
PB84-122910 *
Comprehensive Assessment of the Specific Compounds Present in Combustion Processes. Volume 1. Pilot Study of Combustion Emissions Variability
PB84-140870 *
Organic Emissions from Ferrous Metallurgical Industries: Compilation of Emission Factors and Control Technologies
PB84-141548 *
Ambient Concentrations of Polycyclic Organic Matter
PB84-144146 *
Survey of Direct Analysis Methods for Organic Compounds in Particulate Matter
PB84-154723 *
Equipment Leaks of VOC (Volatile Organic Compounds) in Natural Gas Production Industry - Background Information for Proposed Standards
PB84-155126 *
Sampling and Analysis Methods for Hazardous Waste Combustion
PB84-155845 *
Gaseous Emissions from Excess Air Combustion of Explosives and Propellants
PB84-161421 *
Carcinogen Assessment of Coke Oven Emissions
PB84-170182
Final Environmental Impact Statement Synthetic Fiber Production Facilities: Background Information Promulgated Standards
PB84-181825 *
Passive Sampling Device for Ambient Air and Personal Monitoring
PB84-210046 *
Distillation Operations in Synthetic Organic Chemical Manufacturing - Background Information for Proposed Standards
PB84-214006 *
VOC Emissions from Volatile Organic Liquid Storage Tanks - Background Information for Proposed Standards
PB84-237320 *
Compilation of Air Toxic and Trace Metal Summary Statistics
PB84-245273 *
Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air
(PB Pending. See page 93.) *

PARAQUAT
Source Assessment: Defoliation of Cotton, State of the Art
PB-272 621

PERCHLOROETHYLENE
Source Assessment: Solvent Evaporation - Degreasing Operations
PB80-128812
Organic Solvent Cleaners - Background Information for Proposed Standards
PB80-137912
Perchloroethylene Dry Cleaners - Background Information for Proposed Standards
PB81-100497
Health Assessment Document for Tetrachloroethylene (Perchloroethylene)
PB84-155803 *

PESTICIDES
Source Assessment: Harvesting of Grain - State of the Art
PB-271 697

PHENOL
Source Assessment: Acrylic Acid Manufacture: State of the Art
PB-288 161

PHENOLS
Destroying Chemical Wastes in Commercial Scale Incinerators
PB-278 816

PHOSGENE
Source Assessment: Pesticide Manufacturing Air Emissions - Overview and Prioritization
PB-279 171
Source Assessment: Chlorinated Hydrocarbons Manufacture
PB80-138209

PHOSPHATES
Status Assessment of Toxic Chemicals: Phosphates
PB80-146392
Phosphate Fertilizer Plants
41 FR 19585 (May 12, 1976) *
Phosphate Fertilizer Plants
42 FR 12022 (Mar 1, 1977) *

PHOSPHORUS
Source Assessment: Fertilizer Mixing Plants
PB-253 992

PHOSPHORUS SULFIDES
Source Assessment: Pesticide Manufacturing Air Emissions - Overview and Prioritization
PB-279 171

POLYBROMINATED BIPHENYLS
Status Assessment of Toxic Chemicals: Polybrominated Biphenyls
PB80-146400

POLYCHLORINATED BIPHENYLS (PCB)
Methods for Determining the Polychlorinated Biphenyl Emissions from Incineration and Capacitor and Transformer Filling Plants
PB-276 745
Destroying Chemical Wastes in Commercial Scale Incinerators
PB-278 816
Burning Waste Chlorinated Hydrocarbons in a Cement Kiln
PB-280 118
Monitoring for Polychlorinated Biphenyl Emissions from an Electrolytic Capacitor Disposal Project
PB-284 378
Technical Assistance in Support of Permitting Activities for the Thermal Destruction of PCBs
PB82-231325
PCB Disposal by Thermal Destruction
PB82-241860

POLYCHLORINATED DIBENZOFURAN
PCB Disposal by Thermal Destruction
PB82-241860

POLYCHLORINATED DIBENZO-P-DIOXIN
PCB Disposal by Thermal Destruction
PB82-241860

POLYCYCLIC ORGANIC MATTER
Source Assessment: Agricultural Opening Burning, State of the Art
PB-270 240
Source Assessment: Asphalt Hot Mix
PB-276 731
Source Assessment: Coal-Fired Residential Combustion Equipment Field Tests, June 1977
PB-283 699
Health Assessment Document for Polycyclic Organic Matter
PB82-186792
Source Assessment: Coal Refuse Piles, Abandoned Mines and Outcrops, State of the Art
PB-288 210
Source Assessment: Residential Combustion of Coal
PB-295 649

- Source Assessment: Dry Bottom Industrial Boilers Firing Pulverized Bituminous Coal
  PB80-177207
- Source Assessment: Dry Bottom Utility Boilers Firing Pulverized Bituminous Coal
  PB81-108078
- Source Assessment: Residential Combustion of Wood
  PB81-136160

POLYNUCLEAR AROMATIC HYDROCARBONS
- Status Assessment of Toxic Chemicals: Polynuclear Aromatic Hydrocarbons
  PB80-146418
- Exhaust Emissions from a Diesel Engine
  PB84-122910 *
- Analysis of Residential Coal Stove Emissions
  PB84-130442 *
- Analysis of Polynuclear Aromatic Hydrocarbons in Particulate Matter by Luminescence Techniques
  PB84-181882 *

POLYVINYL CHLORIDE
- Standard Support and Environmental Impact Statement: Emission Standard for Vinyl Chloride
  PB-249 703
- Standard Support and Environmental Impact Statement. Volume 2. Promulgated Emission Standard for Vinyl Chloride
  PB-258 827
- Destroying Chemical Wastes in Commercial Scale Incinerators
  PB-278 816
- Source Assessment: Polyvinyl Chloride
  PB-283 395

POTASSIUM PERMANGANATE
- Source Assessment: Beef Cattle Feedlots
  PB-270 282

PROPANE
- Source Assessment: Acrylic Acid Manufacture: State of the Art
  PB-288 161

PROPYLENE
- Source Assessment: Acrylic Acid Manufacture: State of the Art
  PB-288 161

PROPYLENE OXIDE
- Source Assessment: Chlorinated Hydrocarbons Manufacture
  PB80-138209

RADIOACTIVE CONTAMINANTS
- Background Information Document Proposed Standards for Radionuclides
  PB83-192385
- National Emission Standards for Hazardous Air Pollutants; Standards for Radionuclides
  48 FR 15076 (Apr 6, 1983) *
- National Emission Standards for Hazardous Air Pollutants; Regulation of Radionuclides
  49 FR 43906 (Oct 31, 1984) *
- National Emission Standards for Hazardous Air Pollutants; Standards for Radon-222 Emissions from Underground Uranium Mines
  49 FR 43915 (Oct 31, 1984) *
- National Emission Standards for Hazardous Air Pollutants; Standards for Radon-222 Emissions from Licensed Uranium Mills
  49 FR 43916 (Oct 31, 1984) *

RESINS
- Source Assessment: Prioritization of Air Pollution from Industrial Surface Coating Operations
  PB-243 423
- Source Assessment: Rubber Processing, State of the Art
  PB-281 423
- Industrial Process Profiles for Environmental Use: Chapter 10. Plastics and Resins Industry
  PB-291 640

SALTS
- Source Assessment: Fertilizer Mixing Plants
  PB-253 992

SELENIUM
- Source Assessment: Glass Container Manufacturing Plants
  PB-262 002
- Source Assessment: Pressed and Blown Glass Manufacturing Plants
  PB-273 788

SILICA
- Source Assessment: Crushed Sandstone, Quartz, and Quartzite, State of the Art
  PB-285 210
- Source Assessment: Transport of Sand and Gravel
  PB-289 788

SILICON DIOXIDE
- Source Assessment: Harvesting of Grain - State of the Art
  PB-271 697
- Source Assessment: Crushed Limestone, State of the Art
  PB-281 422
- Source Assessment: Crushed Stone
  PB-284 029
- Source Assessment: Open Mining of Coal, State of the Art
  PB-288 497

SOAPSTONE
- Source Assessment: Rubber Processing, State of the Art
  PB-281 423

SODIUM CHLORATE
- Source Assessment: Defoliation of Cotton, State of the Art
  PB-272 621

SOLVENTS
- Source Assessment: Prioritization of Air Pollution from Industrial Surface Coating Operations
  PB-243 423
- Source Assessment: Rubber Processing, State of the Art
  PB-281 423
- Source Assessment: Reclaiming of Waste Solvents, State of the Art
  PB-282 934
- Source Assessment: Solvent Evaporation - Degreasing Operations
  PB80-128812

STYRENE
- Destroying Chemical Wastes in Commercial Scale Incinerators
  PB-278 816
- Destroying Chemical Wastes in Commercial Scale Incinerators
  PB-278 816
- Standards Support and Environmental Impact Statement Volume 2. Promulgated Standards of Performance for Lignite-Fired Steam Generators
  PB-279 008
- Source Assessment: Rubber Processing, State of the Art
  PB-281 423

SULFIDES
- Source Assessment: Beef Cattle Feedlots
  PB-270 282

SULFUR COMPOUNDS
- Draft Guideline Document: Control of TRS Emissions from Existing Kraft Pulp Mills
  PB-278 135

Source Assessment: Rubber Processing, State of the Art
PB-281 423
SULFURIC ACID
Final Guideline Document: Control of Sulfuric Acid Mist Emissions from Existing Sulfuric Acid Production Units
PB-274 085
A Review of Standards of Performance for New Stationary Sources-Sulfuric Acid Plants
PB-292 278
Standards of Performance for New Stationary Sources, Emission Guidelines for the Control of Sulfuric Acid Mist from Existing Sulfuric Acid Production Units
41 FR 48706 (Nov 4, 1976) *
Standards of Performance for New Stationary Sources, Emission Guideline for Sulfuric Acid Mist
42 FR 55796 (Oct 18, 1977) *
TALC
Source Assessment: Polychloroprene. State of the Art
PB-278 777
1,1,1-TETRACHLOROETYLENE
Health Assessment Document for 1,1,1-Trichloroethane (Methyl Chloroform)
PB84-183565 *
TETRACHLOROETHYLENE
Health Assessment Document for Tetrachloroethylene (Perchloroethylene)
PB84-155803 *
TOLUENE
Source Assessment: Polychloroprene. State of the Art
PB-278 777
Volatile Organic Compounds in the Ambient Atmosphere of the New Jersey, New York Area
PB83-191403
Health Assessment Document for Toluene
PB84-100056
TRIAZINES
Development of Information on Pesticides Manufacturing for Source Assessment
PB-283 051
1,1,1-TRICHLOROETHANE
Organic Solvent Cleaners - Background Information for Proposed Standards
PB80-137912
TRICHLOROETHYLENE
Organic Solvent Cleaners - Background Information for Proposed Standards
PB80-137912
Status Assessment of Toxic Chemicals: Trichloroethylene
PB80-146426
Field Validation of EPA (Environmental Protection Agency) Reference Method 23
PB83-214551
Health Assessment Document for Trichloroethylene, External Review Draft
PB84-162882 *
TRICHLOROTRIFLUOROETHANE
Organic Solvent Cleaners - Background Information for Proposed Standards
PB80-137912
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE
Health Assessment Document for 1,1,2-Trichloro-1,2,2-Trifluoroethane (Chlorofluorocarbon CFC-113)
PB84-118843
TRIS (2,3-DIBROMOPROPYL) PHOSPHATE
Status Assessment of Toxic Chemicals: Tris(2,3-Dibromopropyl) Phosphate
PB80-146434
URACILS
Development of Information on Pesticides Manufacturing for Source Assessment
PB-283 051
UREAS
Development of Information on Pesticides Manufacturing for Source Assessment
PB-283 051
VINYL CHLORIDE
Standard Support and Environmental Impact Statement: Emission Standard for Vinyl Chloride
PB-249 703
Standard Support and Environmental Impact Statement. Volume 2. Promulgated Emission Standard for Vinyl Chloride
PB-258 827
Source Assessment: Polyvinyl Chloride
PB-283 395
Vinyl Chloride: A Review of National Emission Standards
PB84-114354
VINYLIDENE CHLORIDE
Status Assessment of Toxic Chemicals: Vinylidene Chloride
PB80-146442
Health Assessment Document for Vinylidene Chloride. External Review Draft
PB84-126762
National Emission Standards for Hazardous Air Pollutants, Proposed Standard for Vinyl Chloride
40 FR 59532 (Dec 24, 1975) *
National Emission Standards for Hazardous Air Pollutants, Standard for Vinyl Chloride
41 FR 46561 (Oct 21, 1976) *
National Emission Standards for Hazardous Air Pollutants: Vinyl Chloride
42 FR 28154 (Jun 2, 1977) *
Review of New Source Performance Standards for Petroleum Refinery Claus Sulfur Recovery Plants
PB84-101898 *
Kraft Pulp Mills, Draft Guideline Document: Availability
43 FR 7597 (Feb 23, 1978) *
Kraft Pulp Mills, Final Guideline Document; Availability
44 FR 29828 (May 22, 1979) *
p-XYLENE
Volatile Organic Compounds in the Ambient Atmosphere of the New Jersey, New York Area
PB83-191403
ZINC OXIDE
Source Assessment: Rubber Processing, State of the Art
PB-281 423

SOURCE INDEX

The indexing terms for each EPA report entry were assigned from the report abstract, which was taken from the EPA Publications Bibliography, the NTIS data base, or, in some cases, the technical data sheet located in the report itself. The indexing terms for each Federal Register entry were obtained from the Summary and Supplementary Information sections of each notice.

Entries in this section are classified according to the source of the air pollutant emissions. These entries are indexed under the name of the specific source and also under the name of the larger industry group, where applicable. Thus, a report listed under "polyvinyl chloride plants" would also be listed under "chemical industry".

The entries are arranged by source category and then by NTIS order number or by Federal Register volume and page number. An asterisk denotes an entry new to this edition.

ACETONE MANUFACTURING
Source Assessment: Manufacture of Acetone and Phenol from Cumene
PB80-150592

ACRYLIC ACID MANUFACTURING
Source Assessment: Acrylic Acid Manufacture: State of the Art
PB-288 161

ACRYLONITRILE PLANTS
Source Assessment: Acrylonitrile Manufacture (Air Emissions)
PB-271 969
Ambient Acrylonitrile Levels Near Major Acrylonitrile Production and Use Facilities
PB83-196154

ADHESIVES INDUSTRY
Pressure Sensitive Tape and Label Surface Coating Industry - Background Information for Proposed Standards
PB81-105942
Pressure Sensitive Tape and Label Surface Coating Industry - Background Information for Promulgated Standards
PB84-116748

AGRICULTURE
Source Assessment: Agricultural Opening Burning, State of the Art
PB-270 240
Source Assessment: Beef Cattle Feedlots
PB-270 282
Source Assessment: Mechanical Harvesting of Cotton - State of the Art
PB-271 486
Source Assessment: Harvesting of Grain - State of the Art
PB-271 697
Source Assessment: Defoliation of Cotton, State of the Art
PB-272 621
Source Assessment: Cotton Gins
PB-280 024
Standards Support and Environmental Impact Statement Volume 1: Proposed Standards of Performance for Grain Elevator Industry
PB80-194152
Standards Support and Environmental Impact Statement. Volume 2: Promulgated Standards of Performance for Grain Elevator Industry
PB80-198435
Relative Airborne Losses of Commercial 2,4-D Formulations from a Simulated Wheat Field
PB84-142322 *
Review of New Source Performance Standards for Grain Elevators
PB84-175744 *

AIR OXIDATION PROCESSES
Air Oxidation Processes in Synthetic Organic Chemical Manufacturing Industry - Background Information for Proposed Standards
PB84-114834

ALUMINUM INDUSTRY
Background Information for Standards of Performance: Primary Aluminum Industry. Volume I: Proposed Standards
PB-237 612
Background Information for Standards of Performance: Primary Aluminum Industry. Volume I: Test Data Summary
PB-237 613
Background Information for Standards of Performance: Primary Aluminum Industry. Volume 3: Supplemental Information
PB-250 667
Industrial Process Profiles for Environmental Use: Chapter 25. Primary Aluminum Industry
PB-281 491
Primary Aluminum Plants; Draft Guideline Document; Availability
44 FR 21754 (Apr 11, 1979) *
Primary Aluminum Plants; Availability of Final Guideline Document
45 FR 26294 (Apr 17, 1980) *
Primary Aluminum: Draft Guidelines for Control of Fluoride Emissions from Existing Primary Aluminum Plants
PB-294 938
Primary Aluminum: Guidelines for Control of Fluoride Emissions from Existing Primary Aluminum Plants
PB80-153935
Primary Aluminum - Background Information for Promulgated Amendments
PB80-192479
Primary Aluminum. Background Information: Proposed Amendments
PB82-242611

AMMONIA PRODUCTION
Source Assessment: Synthetic Ammonia Production
PB-276 718

AMMONIUM NITRATE MANUFACTURING
Source Assessment: Ammonium Nitrate Production
PB-271 984

AMMONIUM SULFATE PLANTS
Ammonium Sulfate Manufacture - Background Information for Proposed Emission Standards
PB80-140163
Ammonium Sulfate Manufacture - Background Information for Promulgated Emission Standards
PB81-118747

ASPHALT INDUSTRY
Source Assessment: Background Information for Proposed New Source Performance Standards: Asphalt Concrete Plants, Petroleum Refineries, Storage Vessels, Secondary Lead Smelters and Refineries, Brass or Bronze Ingot Production Plants, Iron and Steel Plants, Sewage Treatment Plants. Volume I. Main Text
PB-221 736
Background Information for Proposed New Source Performance Standards: Asphalt Concrete Plants, Petroleum Refineries, Storage Vessels, Secondary Lead Smelters and Refineries, Brass or Bronze Ingot Production Plants, Iron and Steel Plants, Sewage Treatment Plants. Volume 2. Appendix: Summaries of Test Data.
PB-229 660
Background Information for New Source Performance Standards: Asphalt Concrete Plants, Petroleum Refineries, Storage Vessels, Secondary Lead Smelters and Refineries, Brass and Bronze Ingot Production Plants, Iron and Steel Plants, and Sewage Treatment Plants. Volume 3. Promulgated Standards
PB-231 601
Source Assessment: Asphalt Hot Mix
PB-276 731
Source Assessment: A Review of Standards of Performance for New Stationary Sources - Asphalt Concrete Plants
PB-298 427

Asphalt Roofing Manufacturing Industry - Background Information for Proposed Standards.
PB80-212111
Asphalt Roofing Manufacturing Industry - Background Information for Promulgated Standards
PB82-257726

AUTOMOBILE INDUSTRY

Automobile and Light-Duty Truck Surface Coating Operations-Background Information for Proposed Standards
PB80-123540
Reference Method 24-Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings. Reference Method 25-Determination of Total Gaseous Nonmethane Organic Emissions as Carbon. Background Information for Promulated Test Methods.
PB80-209778
Automobile and Light-Duty Truck Surface Coating Operations-Background Information for Promulgated Standards
PB81-113920

BARIUM CHEMICAL MANUFACTURING

Source Assessment: Major Barium Chemicals
PB-280 756

BASIC OXYGEN PROCESS FURNACES

Background Information for an Opacity Standard of Performance for Basic Oxygen Process Furnaces in Iron and Steel Plants
PB-265 479
A Review of Standards of Performance for New Stationary Sources-Iron and Steel Plants/Basic Oxygen Furnaces
PB-289 877
Revised Standards for Basic Oxygen Process Furnaces: Background Information for Proposed Standards
PB83-166488

BATTERY MANUFACTURING

Lead-Acid Battery Manufacture - Background Information for Promulgated Standards
PB82-202490

BOILERS

Source Assessment: Background Information for Proposed New-Source Performance Standards: Steam Generators, Incinerators, Portland Cement Plants, Nitric Acid Plants, Sulfuric Acid Plants
PB-202 459
Standards Support and Environmental Impact Statement Volume I: Proposed Standards of Performance for Lignite-Fired Steam Generators
PB-267 610
Standards Support and Environmental Impact Statement Volume 2. Promulgated Standards of Performance for Lignite-Fired Steam Generators
PB-279 008
Source Assessment: Dry Bottom Industrial Boilers Firing Pulverized Bituminous Coal
PB80-177207
Source Assessment: Dry Bottom Utility Boilers Firing Pulverized Bituminous Coal
PB81-108078
Fossil Fuel Fired Industrial Boilers - Background Information. Volume 1: Chapters 1-9
PB82-202573 *
Fossil Fuel Fired Industrial Boilers - Background Information. Volume 2: Appendices
PB82-202581 *
Nonfossil Fuel Fired Industrial Boilers: Background Information
PB82-203209 *

Technical Assistance in Support of Permitting Activities for the Thermal Destruction of PCBs
PB82-231325
Background Information Document Proposed Standards for Radionuclides
PB83-192385

BRASS AND BRONZE PLANTS

Source Assessment: Background Information for Proposed New Source Performance Standards: Asphalt Concrete Plants, Petroleum Refineries, Storage Vessels, Secondary Lead Smelters and Refineries, Brass or Bronze Ingot Production Plants, Iron and Steel Plants, Sewage Treatment Plants. Volume I. Main Text
PB-221 736
Background Information for Proposed New Source Performance Standards: Asphalt Concrete Plants, Petroleum Refineries, Storage Vessels, Secondary Lead Smelters and Refineries, Brass or Bronze Ingot Production Plants, Iron and Steel Plants, Sewage Treatment Plants. Volume 2. Appendix: Summaries of Test Data.
PB-229 660
Background Information for New Source Performance Standards: Asphalt Concrete Plants, Petroleum Refineries, Storage Vessels, Secondary Lead Smelters and Refineries, Brass and Bronze Ingot Production Plants, Iron and Steel Plants, and Sewage Treatment Plants. Volume 3. Promulgated Standards
PB-231 601
A Review of Standards for New Stationary Sources - Secondary Brass and Bronze Plants
PB-296 953

BRICK MANUFACTURING

Industrial Process Profiles for Environmental Use: Chapter 19. The Clay Industry
PB-281 486

BRINE AND EVAPORITE CHEMICALS INDUSTRY

Industrial Process Profiles for Environmental Use: Chapter 15. Brine and Evaporite Chemicals Industry
PB-281 482

BUILDINGS AND STRUCTURES

Background Information-Proposed National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, Mercury
PB-204 876
Background Information on Development of National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, and Mercury
PB-222 802
Standards Support Document: Promulgated Amendments to the National Emission Standard for Asbestos
PB-283 661
Analysis of Residential Coal Stove Emissions
PB84-130442 *
National Emission Standards for Hazardous Air Pollutants, Proposed Standards for Asbestos, Beryllium, and Mercury
36 FR 23239 (Dec 7, 1971) *
National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, and Mercury
38 FR 8820 (Apr 6, 1973) *
National Emission Standard for Hazardous Air Pollutants, Proposed Amendments to Asbestos Standard
42 FR 12122 (Mar 2, 1977) *
National Emission Standards for Hazardous Air Pollutants, Amendments to Asbestos Standard
43 FR 26372 (Jun 19, 1978) *

National Emission Standards for Hazardous Air Pollutants; Amendments to Asbestos Standard
48 FR 32126 (Jul 13, 1983) *
National Emission Standards for Hazardous Air Pollutants; Amendments to Asbestos Standard
49 FR 13658 (Apr 5, 1984) *

BULK GASOLINE TERMINALS
Bulk Gasoline Terminals - Background Information for Proposed Standards
PB82-152869
Bulk Gasoline Terminals: Background Information for Promulgated Standards
PB83-256206

CAN MANUFACTURING
Beverage Can Surface Coating Industry - Background Information for Proposed Standards
PB81-113904
Beverage Can Surface Coating Industry--Background Information for Promulgated Standards of Performance
PB84-114859

CAPACITOR AND TRANSFORMER PLANTS
Methods for Determining the Polychlorinated Biphenyl Emissions from Incineration and Capacitor and Transformer Filling Plants
PB-276 745

CARBON BLACK MANUFACTURING
Source Assessment: Carbon Black Manufacture
PB-273 068
Industrial Process Profiles for Environmental Use: Chapter 4. Carbon Black Industry
PB-281 477

CEMENT INDUSTRY
Source Assessment: Background Information for Proposed New-Source Performance Standards: Steam Generators, Incinerators, Portland Cement Plants, Nitric Acid Plants, Sulfuric Acid Plants
PB-202 459
Burning Waste Chlorinated Hydrocarbons in a Cement Kiln
PB-280 118
Industrial Process Profiles for Environmental Use: Chapter 21. The Cement Industry
PB-281 488
A Review of Standards of Performance for New Stationary Sources - Portland Cement Industry
PB80-112089

CERAMIC PLANTS
Background Information-Proposed National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, Mercury
PB-204 876
Background Information on Development of National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, and Mercury
PB-222 802
National Emission Standards for Hazardous Air Pollutants, Proposed Standards for Asbestos, Beryllium, and Mercury
36 FR 23239 (Dec 7, 1971) *
National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, and Mercury
38 FR 8820 (Apr 6, 1973) *

CHARCOAL MANUFACTURING
Source Assessment: Charcoal Manufacturing, State of the Art.
PB-290 125

CHEMICAL INDUSTRY
Source Assessment: Background Information for Proposed New-Source Performance Standards: Steam Generators, Incinerators, Portland Cement Plants, Nitric Acid Plants, Sulfuric Acid Plants
PB-202 459
Background Information-Proposed National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, Mercury
PB-204 876
Background Information on Development of National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, and Mercury
PB-222 802
Standard Support and Environmental Impact Statement: Emission Standard for Vinyl Chloride
PB-249 703
Source Assessment: Fertilizer Mixing Plants
PB-253 992
Standard Support and Environmental Impact Statement. Volume 2. Promulgated Emission Standard for Vinyl Chloride
PB-258 827
Industrial Process Profiles for Environmental Use: Chapter 5. Basic Petrochemicals Industry
PB-266 224
Industrial Process Profiles for Environmental Use: Chapter 8. Pesticides Industry
PB-266 225
Source Assessment: Phthalic Anhydride (Air Emissions)
PB-266 797
Source Assessment: Acrylonitrile Manufacture (Air Emissions)
PB-271 969
Source Assessment: Ammonium Nitrate Production
PB-271 984
Source Assessment: Carbon Black Manufacture
PB-273 068
Final Guideline Document: Control of Sulfuric Acid Mist Emissions from Existing Sulfuric Acid Production Units
PB-274 085
Source Assessment: Urea Manufacture
PB-274 367
Source Assessment: Synthetic Ammonia Production
PB-276 718
Source Assessment: Polychloroprene. State of the Art
PB-278 777
Source Assessment: Pesticide Manufacturing Air Emissions - Overview and Prioritization
PB-279 171
Source Assessment: Major Barium Chemicals
PB-280 756
Industrial Process Profiles for Environmental Use: Chapter 4. Carbon Black Industry
PB-281 477
Industrial Process Profiles for Environmental Use: Chapter 6. The Industrial Organic Chemicals Industry
PB-281 478
Industrial Process Profiles for Environmental Use: Chapter 7. Organic Dyes and Pigments Industry
PB-281 479
Industrial Process Profiles for Environmental Use: Chapter 15. Brine and Evaporite Chemicals Industry
PB-281 482
Industrial Process Profiles for Environmental Use: Chapter 16. The Fluorocarbon-Hydrogen Fluoride Industry
PB-281 483

Industrial Process Profiles for Environmental Use: Chapter 17. The Gypsum and Wallboard Industry
PB-281 484
Industrial Process Profiles for Environmental Use: Chapter 18. The Lime Industry
PB-281 485
Industrial Process Profiles for Environmental Use: Chapter 19. The Clay Industry
PB-281 486
Industrial Process Profiles for Environmental Use: Chapter 22. The Phosphate Rock and Basic Fertilizer Materials Industry
PB-281 489
Industrial Process Profiles for Environmental Use: Chapter 23. Sulfur, Sulfur Oxides and Sulfuric Acid
PB-281 490
Development of Information on Pesticides Manufacturing for Source Assessment
PB-283 051
Source Assessment: Polyvinyl Chloride
PB-283 395
Assessment of Human Exposures to Atmospheric Benzene
PB-284 203
Source Assessment: Chemical and Fertilizer Mineral Industry, State of the Art
PB-285 662
Source Assessment: Acrylic Acid Manufacture: State of the Art
PB-288 161
Industrial Process Profiles for Environmental Use: Chapter 10. Plastics and Resins Industry
PB-291 640
Industrial Process Profiles for Environmental Use. Chapter 12. The Explosives Industry
PB-291 641
Industrial Process Profiles for Environmental Use: Chapter 13, Plasticizers Industry
PB-291 642
A Review of Standards of Performance for New Stationary Sources-Sulfuric Acid Plants
PB-292 278
A Review of Standards of Performance for New Stationary Sources - Nitric Acid Plants
PB-294 962
Source Assessment: Phosphate Fertilizer Industry
PB-300 681
Source Assessment: Chlorinated Hydrocarbons Manufacture
PB80-138209
Ammonium Sulfate Manufacture - Background Information for Proposed Emission Standards
PB80-140163
Status Assessment of Toxic Chemicals: Acrylonitrile
PB80-146301
Status Assessment of Toxic Chemicals: Arsenic
PB80-146319
Status Assessment of Toxic Chemicals: Asbestos
PB80-146327
Status Assessment of Toxic Chemicals: Benzene
PB80-146335
Status Assessment of Toxic Chemicals: Benzidine
PB80-146343
Status Assessment of Toxic Chemicals: Cadmium
PB80-146350
Status Assessment of Toxic Chemicals: Hexachlorobenzene
PB80-146368
Status Assessment of Toxic Chemicals: Lead
PB80-146376
Status Assessment of Toxic Chemicals: Mercury
PB80-146384
Status Assessment of Toxic Chemicals: Phosphates
PB80-146392
Status Assessment of Toxic Chemicals: Polynuclear Aromatic Hydrocarbons
PB80-146418
Status Assessment of Toxic Chemicals: Trichloroethylene
PB80-146426
Status Assessment of Toxic Chemicals: Tris(2,3-Dibromopropyl) Phosphate
PB80-146434
Status Assessment of Toxic Chemicals: Vinylidene Chloride
PB80-146442
Source Assessment: Manufacture of Acetone and Phenol from Cumene
PB80-150592
Benzene Emissions from Maleic Anhydride Industry - Background Information for Proposed Standards
PB80-157812
Sodium Carbonate Industry - Background Information for Proposed Standards
PB80-219678
Benzene Emissions from the Ethylbenzene/Styrene Industry-Background Information for Proposed Standards
PB80-219686
Ammonium Sulfate Manufacture - Background Information for Promulgated Emission Standards
PB81-118747
Benzene Emissions from Benzene Storage Tanks - Background Information for Proposed Standards
PB81-151433
Benzene Fugitive Emissions - Background Information for Proposed Standards
PB81-151664
VOC Fugitive Emissions in Synthetic Organic Chemicals Manufacturing Industry - Background Information for Proposed Standards
PB81-152167
Fugitive Emission Sources of Organic Compounds - Additional Information on Emissions, Emission Reductions, and Costs
PB82-217126
Assessment of Human Exposures to Atmospheric Acrylonitrile
PB82-242256
Preliminary Study of Sources of Inorganic Arsenic
PB83-153528
Ambient Acrylonitrile Levels Near Major Acrylonitrile Production and Use Facilities
PB83-196154
Field Validation of EPA (Environmental Protection Agency) Reference Method 23
PB83-214551
Human Exposure to Atmospheric Concentrations of Selected Chemicals. Volume 2
PB83-265249
Human Exposure to Atmospheric Concentrations of Selected Chemicals. Volume 1
PB84-102540
VOC Fugitive Emissions in Synthetic Organic Chemicals Manufacturing Industry - Background Information for Promulgated Standards
PB84-105311 *
Vinyl Chloride: A Review of National Emission Standards
PB84-114354

- Air Oxidation Processes in Synthetic Organic Chemical Manufacturing Industry - Background Information for Proposed Standards
- PB84-114834
- Benzene Emissions from Benzene Storage Tanks: Background Information for Proposal to Withdraw Proposed Standards
- PB84-167683 *
- Benzene Emissions from Maleic Anhydride Plants: Background Information for Proposal to Withdraw Proposed Standards
- PB84-170174 *
- Benzene Emissions from Ethylbenzene/Styrene Plants - Background Information for Proposal to Withdraw Proposed Standards
- PB84-176874 *
- Benzene Fugitive Emissions - Background Information for Promulgated Standards
- PB84-210301 *
- Distillation Operations in Synthetic Organic Chemical Manufacturing - Background Information for Proposed Standards
- PB84-214006 *
- VOC Emissions from Volatile Organic Liquid Storage Tanks - Background Information for Proposed Standards
- PB84-237320 *
- National Emission Standards for Hazardous Air Pollutants, Proposed Standards for Asbestos, Beryllium, and Mercury
- 36 FR 23239 (Dec 7, 1971) *
- National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, and Mercury
- 38 FR 8820 (Apr 6, 1973) *
- National Emission Standards for Hazardous Air Pollutants, Proposed Standard for Vinyl Chloride
- 40 FR 59532 (Dec 24, 1975) *
- National Emission Standards for Hazardous Air Pollutants, Standard for Vinyl Chloride
- 41 FR 46561 (Oct 21, 1976) *
- National Emission Standards for Hazardous Air Pollutants: Vinyl Chloride.
- 42 FR 28154 (Jun 2, 1977) *
- National Emission Standard for Hazardous Air Pollutants; Benzene Emissions from Maleic Anhydride Plants
- 45 FR 26660 (Apr 18, 1980) *
- National Emissions Standards for Hazardous Air Pollutants; Benzene Emissions from Ethylbenzene/Styrene Plants; Public Hearing.
- 45 FR 83448 (Dec 18, 1980) *
- National Emission Standard for Hazardous Air Pollutants; Benzene Fugitive Emissions
- 46 FR 1165 (Jan 5, 1981) *
- National Emission Standards for Hazardous Air Pollutants; Benzene Emissions from Maleic Anhydride Plants, Ethylbenzene/Styrene Plants, and Benzene Storage Vessels; Proposed Withdrawal of Proposed Standards
- 49 FR 8386 (Mar 6, 1984) *
- National Emission Standards for Hazardous Air Pollutants; Regulation of Benzene
- 49 FR 23478 (Jun 6, 1984) *
- CHLOR-ALKALI PLANTS
  - Background Information-Proposed National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, Mercury
  - PB-204 876
  - Background Information on Development of National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, and Mercury
  - PB-222 802
  - National Emission Standards for Hazardous Air Pollutants, Proposed Standards for Asbestos, Beryllium, and Mercury
  - 36 FR 23239 (Dec 7, 1971) *
  - National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, and Mercury
  - 38 FR 8820 (Apr 6, 1973) *
- CHLORINATED HYDROCARBON MANUFACTURING
  - Source Assessment: Chlorinated Hydrocarbons Manufacture
  - PB80-138209
- CLAY INDUSTRY
  - Industrial Process Profiles for Environmental Use: Chapter 19. The Clay Industry
  - PB-281 486
- CLEANERS
  - Organic Solvent Cleaners - Background Information for Proposed Standards
  - PB80-137912
- CLEANING
  - Source Assessment: Rail Tank Car, Tank Truck, and Drum Cleaning, State of the Art
  - PB-280 726
- COAL PREPARATION PLANTS
  - Background Information for Standards of Performance: Coal Preparation Plants, Volume I: Proposed Standards
  - PB-237 421
  - Background Information for Standards of Performance: Coal Preparation Plants. Volume 2. Summary and Test Data
  - PB-237 696
  - Background Information for Standards of Performance: Coal Preparation Plants. Volume 3. Supplemental Information
  - PB-251 618
  - A Review of Standards of Performance for New Stationary Sources - Coal Preparation Plants
  - PB82-152851
- COAL STORAGE
  - Source Assessment: Coal Storage Piles
  - PB-284 297
- COATING OPERATIONS
  - Source Assessment: Prioritization of Air Pollution from Industrial Surface Coating Operations
  - PB-243 423
  - Automobile and Light-Duty Truck Surface Coating Operations-Background Information for Proposed Standards
  - PB80-123540
  - Reference Method 24-Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings. Reference Method 25-Determination of Total Gaseous Nonmethane Organic Emissions as Carbon. Background Information for Promulated Test Methods.
  - PB80-209778
  - Pressure Sensitive Tape and Label Surface Coating Industry - Background Information for Proposed Standards
  - PB81-105942
  - Beverage Can Surface Coating Industry - Background Information for Proposed Standards
  - PB81-113904
  - Automobile and Light-Duty Truck Surface Coating Operations-Background Information for Promulgated Standards
  - PB81-113920
  - Surface Coating of Metal Furniture - Background Information for Proposed Standards
  - PB81-113938

Metal Coil Surface Coating Industry - Background Information for Proposed Standards
PB81-123572
Industrial Surface Coating: Appliances - Background Information for Proposed Standards
PB82-152174
Metal Coil Surface Coating Industry - Background Information for Promulgated Standards
PB83-124867
Industrial Surface Coating: Large Appliances - Background Information for Promulgated Standards
PB83-124941
Surface Coating of Metal Furniture - Background Information for Promulgated Standards
PB83-136390
Flexible Vinyl Coating and Printing Operations - Background Information for Proposed Standards
PB83-169136
Beverage Can Surface Coating Industry--Background Information for Promulgated Standards of Performance
PB84-114859
Pressure Sensitive Tape and Label Surface Coating Industry - Background Information for Promulgated Standards
PB84-116748

COKE BY-PRODUCT RECOVERY PLANTS
National Emission Standards for Hazardous Air Pollutants; Proposed Standards for Benzene Emissions from Coke By-Product Recovery Plants
49 FR 23522 (Jun 6, 1984) *

COKE OVENS
Assessment of Human Exposures to Atmospheric Benzene
PB-284 203
Human Population Exposures to Coke-Oven Atmospheric Emissions
PB82-250234
Preliminary Environmental Assessment on Formcoke Cokemaking Process
PB83-259713 *
Carcinogen Assessment of Coke Oven Emissions
PB84-170182 *
Benzene Emissions from Coke By-Product Recovery Plants - Background Information for Proposed Standards
PB84-209477 *

COMBUSTION
Source Assessment; Background Information for Proposed New-Source Performance Standards: Steam Generators, Incinerators, Portland Cement Plants, Nitric Acid Plants, Sulfuric Acid Plants
PB-202 459
Background Information on National Emission Standards for Hazardous Air pollutants - Proposed Amendments to Standards for Asbestos and Mercury
PB-237 169
Standards Support and Environmental Impact Statement Volume I: Proposed Standards of Performance for Lignite-Fired Steam Generators
PB-267 610
Source Assessment: Agricultural Opening Burning, State of the Art
PB-270 240
Methods for Determining the Polychlorinated Biphenyl Emissions from Incineration and Capacitor and Transformer Filling Plants
PB-276 745
Destroying Chemical Wastes in Commercial Scale Incinerators
PB-278 816
Standards Support and Environmental Impact Statement Volume 2. Promulgated Standards of Performance for Lignite-Fired Steam Generators
PB-279 008
Burning Waste Chlorinated Hydrocarbons in a Cement Kiln
PB-280 118
Environmental Assessment: At-Sea and Land-Based Incineration of Organochlorine Wastes
PB-283 642
Source Assessment: Coal-Fired Residential Combustion Equipment Field Tests, June 1977
PB-283 699
Kepone Incineration Test Program
PB-285 000
Source Assessment: Coal Refuse Piles, Abandoned Mines and Outcrops, State of the Art
PB-288 210
Source Assessment: Residential Combustion of Coal
PB-295 649
A Review of Standards of Performance for New Stationary Sources - Incinerators
PB80-124787
A Review of Standards of Performance for New Stationary Sources - Sewage Sludge Incinerators
PB80-125446
Status Assessment of Toxic Chemicals: Benzene
PB80-146335
Assessment of Human Exposures to Atmospheric Cadmium
PB80-153885
Source Assessment: Dry Bottom Industrial Boilers Firing Pulverized Bituminous Coal
PB80-177207
Source Assessment: Prescribed Burning, State of the Art
PB80-181472
Source Assessment: Dry Bottom Utility Boilers Firing Pulverized Bituminous Coal
PB81-108078
Source Assessment: Residential Combustion of Wood
PB81-136160
Thermal Conversion of Municipal Wastewater Sludge, Phase II: Study of Heavy Metal Emissions
PB82-111816
Health Assessment Document for Polycyclic Organic Matter
PB82-186792
Fossil Fuel Fired Industrial Boilers - Background Information. Volume 1: Chapters 1-9
PB82-202573 *
Fossil Fuel Fired Industrial Boilers - Background Information. Volume 2: Appendices
PB82-202581 *
Preliminary Environmental Assessment on Formcoke Cokemaking Process
Technical Assistance in Support of Permitting Activities for the Thermal Destruction of PCBs
PB82-231325
PCB Disposal by Thermal Destruction
PB82-241860
Background Information Document Proposed Standards for Radionuclides
PB83-192385
Preliminary Environmental Assessment on Formcoke Cokemaking Process
PB83-259713 *
Multimedia Environmental Assessment of Electric Submerged Arc Furnaces Producing Ferroalloys
PB83-262063 *
Analysis of Residential Coal Stove Emissions
PB84-130442 *

Comprehensive Assessment of the Specific Compounds Present in Combustion Processes. Volume 1. Pilot Study of Combustion Emissions Variability
PB84-140870 *
Draft Environmental Impact Statement Sulfur Oxides Emissions from Fluid Catalytic Cracking Unit Regenerators: Background Information for Proposed Standards
PB84-143254 *
Sampling and Analysis Methods for Hazardous Waste Combustion
PB84-155845 *

CONCRETE PLANTS
Source Assessment: Background Information for Proposed New Source Performance Standards: Asphalt Concrete Plants, Petroleum Refineries, Storage Vessels, Secondary Lead Smelters and Refineries, Brass or Bronze Ingot Production Plants, Iron and Steel Plants, Sewage Treatment Plants. Volume I. Main Text
PB-221 736
Background Information for Proposed New Source Performance Standards: Asphalt Concrete Plants, Petroleum Refineries, Storage Vessels, Secondary Lead Smelters and Refineries, Brass or Bronze Ingot Production Plants, Iron and Steel Plants, Sewage Treatment Plants. Volume 2. Appendix: Summaries of Test Data.
PB-229 660
Background Information for New Source Performance Standards: Asphalt Concrete Plants, Petroleum Refineries, Storage Vessels, Secondary Lead Smelters and Refineries, Brass and Bronze Ingot Production Plants, Iron and Steel Plants, and Sewage Treatment Plants. Volume 3. Promulgated Standards
PB-231 601
Source Assessment: A Review of Standards of Performance for New Stationary Sources - Asphalt Concrete Plants
PB-298 427

CONSTRUCTION
Background Information-Proposed National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, Mercury
PB-204 876
Background Information on Development of National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, and Mercury
PB-222 802
Background Information on National Emission Standards for Hazardous Air pollutants - Proposed Amendments to Standards for Asbestos and Mercury
PB-237 169
Standards Support Document: Promulgated Amendments to the National Emission Standard for Asbestos
PB-283 661
Asphalt Roofing Manufacturing Industry - Background Information for Proposed Standards.
PB80-212111
Wool Fiberglass Insulation Manufacturing Industry - Background Information for Proposed Standards
PB84-156264 *
National Emission Standards for Hazardous Air Pollutants, Proposed Standards for Asbestos, Beryllium, and Mercury
36 FR 23239 (Dec 7, 1971) *
National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, and Mercury
38 FR 8820 (Apr 6, 1973) *
Asbestos and Mercury, Proposed Admendments to National Emission Standards for Hazardous Air Pollutants
39 FR 38064 (Oct 25, 1974) *
National Emission Standards for Hazardous Air Pollutants, Amendments to Standards for Asbestos and Mercury
40 FR 48299 (Oct 14, 1975) *
National Emission Standard for Hazardous Air Pollutants, Proposed Amendments to Asbestos Standard
42 FR 12122 (Mar 2, 1977) *
National Emission Standards for Hazardous Air Pollutants, Amendments to Asbestos Standard
43 FR 26372 (Jun 19, 1978) *
National Emission Standards for Hazardous Air Pollutants; Amendments to Asbestos Standard
48 FR 32126 (Jul 13, 1983) *
National Emission Standards for Hazardous Air Pollutants; Amendments to Asbestos Standard
49 FR 13658 (Apr 5, 1984) *

COPPER INDUSTRY
Industrial Process Profiles for Environmental Use: Chapter 29. Primary Copper Industry
PB81-164915

COPPER SMELTERS
Background Information for New Source Performance Standards: Primary Copper, Zinc, and Lead Smelters. Volume 1: Proposed Standards.
PB-237 832
Preliminary Study of Sources of Inorganic Arsenic
PB83-153528
Inorganic Arsenic Emissions from High-Arsenic Primary Copper Smelters - Background Information for Proposed Standards
PB83-234120
Review of New Source Performance Standards for Primary Copper Smelters: Chapters 1 through 9
PB84-179951 *
Review of New Source Performance Standards for Primary Copper Smelters: Appendices
PB84-179969 *

COTTON GINS
Source Assessment: Cotton Gins
PB-280 024
Preliminary Study of Sources of Inorganic Arsenic
PB83-153528

DEGREASING OPERATIONS
Source Assessment: Solvent Evaporation - Degreasing Operations
PB80-128812
Organic Solvent Cleaners - Background Information for Proposed Standards
PB80-137912
Field Validation of EPA (Environmental Protection Agency) Reference Method 23
PB83-214551

DEMOLITION AND RENOVATION
Background Information-Proposed National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, Mercury
PB-204 876
Background Information on Development of National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, and Mercury
PB-222 802
Background Information on National Emission Standards for Hazardous Air Pollutants - Proposed Amendments to Standards for Asbestos and Mercury
PB-237 169

Standards Support Document: Promulgated Amendments to the National Emission Standard for Asbestos
PB-283 661
National Emission Standards for Hazardous Air Pollutants, Proposed Standards for Asbestos, Beryllium, and Mercury
36 FR 23239 (Dec 7, 1971) *
National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, and Mercury
38 FR 8820 (Apr 6, 1973) *
Asbestos and Mercury, Proposed Admendments to National Emission Standards for Hazardous Air Pollutants
39 FR 38064 (Oct 25, 1974) *
National Emission Standards for Hazardous Air Pollutants, Amendments to Standards for Asbestos and Mercury
40 FR 48299 (Oct 14, 1975) *
National Emission Standard for Hazardous Air Pollutants, Proposed Amendments to Asbestos Standard
42 FR 12122 (Mar 2, 1977) *
National Emission Standards for Hazardous Air Pollutants, Amendments to Asbestos Standard
43 FR 26372 (Jun 19, 1978) *
National Emission Standards for Hazardous Air Pollutants; Amendments to Asbestos Standard
48 FR 32126 (Jul 13, 1983) *
National Emission Standards for Hazardous Air Pollutants; Amendments to Asbestos Standard
49 FR 13658 (Apr 5, 1984) *

DRY CLEANING

Perchloroethylene Dry Cleaners - Background Information for Proposed Standards
PB81-100497
Petroleum Dry Cleaners - Background Information for Proposed Standards
PB84-116045
Petroleum Dry Cleaners - Background Information for Promulgated Standards
PB85-110567 *

DYES AND PIGMENTS INDUSTRY

Industrial Process Profiles for Environmental Use: Chapter 7. Organic Dyes and Pigments Industry
PB-281 479
Status Assessment of Toxic Chemicals: Polynuclear Aromatic Hydrocarbons
PB80-146418

ELECTRIC ARC FURNACES

Background Information for Standards of Performance: Electric Submerged Arc Furnaces for Production of Ferroalloys. Volume I: Proposed Standards
PB-237 411
Background Information for Standards for Performance: Electric Arc Furnaces in the Steel Industry, Volume 1: Proposed Standards
PB-237 840
Background Information for Standards of Performance: Electric Arc Furnaces in the Steel Industry. Volume 2: Test Data Summary
PB-237 841
Background Information for Standards of Performance: Electric Submerged Arc Furnaces for Production of Ferroalloys. Volume 2: Test Data Summary
PB-238 077
Background Information for Standards of Performance: Electric Submerged Arc Furnaces for Production of Ferroalloys. Volume 3: Supplemental Information
PB-252 031
Review of Standards of Performance for Electric Arc Furnaces in Steel Industry
PB80-154602
Electric Arc Furnaces in Ferrous Foundries - Background Information for Proposed Standards
PB80-202997
Multimedia Environmental Assessment of Electric Submerged Arc Furnaces Producing Ferroalloys
PB83-262063 *
Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels in the Steel Industry--Background Information for Proposed Revisions to Standards
PB84-120641
Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels in Steel Plants--Background Information for Promulgated Standards of Performance
PB85-124204 *

ELECTRIC POWER PLANTS

Source Assessment: Background Information for Proposed New-Source Performance Standards: Steam Generators, Incinerators, Portland Cement Plants, Nitric Acid Plants, Sulfuric Acid Plants
PB-202 459
Standards Support and Environmental Impact Statement Volume I: Proposed Standards of Performance for Lignite-Fired Steam Generators
PB-267 610
Standards Support and Environmental Impact Statement Volume 2. Promulgated Standards of Performance for Lignite-Fired Steam Generators
PB-279 008
Electric Utility Steam Generating Units: Background Information for Proposed NO_x Emission Standards
PB-286 155
Utility Steam Generating Units: Background Information for Proposed SO_2 Emission Standards
PB-286 159
Electric Utility Steam Generating Units - Particulate Matter, Background Information for Proposed Emission Standards
PB-286 224
Electric Utility Steam Generating Units - Background Information for Proposed SO_2 Emission Standards
PB-286 225
Electric Utility Steam Generating Units: Background Information for Promulgated Emission Standards
PB-298 510
Source Assessment: Dry Bottom Utility Boilers Firing Pulverized Bituminous Coal
PB81-108078
Sampling for High-Molecular-Weight Organic Compounds in Power Plant Stack Gases
PB82-234618
Background Information Document Proposed Standards for Radionuclides
PB83-192385
Ohio River Valley Study. Sites, Methods, Data Summary for 1980, Volume 1. Main Report
PB83-212043
Ohio River Valley Study. Sites, Methods, Data Summary for 1980. Volume 2. Appendices
PB83-212050
Emission Characterization of Major Fossil Fuel Power Plants in the Ohio River Valley
PB84-120328 *
Comprehensive Assessment of the Specific Compounds Present in Combustion Processes. Volume 1. Pilot Study of Combustion Emissions Variability
PB84-140870 *

ELECTRICAL EQUIPMENT INDUSTRY
Industrial Process Profiles for Environmental Use: Chapter 30. The Electronic Component Manufacturing Industry
PB83-199190

ENGINES
Stationary Internal Combustion Engines. Standards Support and Environmental Impact Statement. Volume I: Proposed Standards of Performance
PB83-113563
Exhaust Emissions from a Diesel Engine
PB84-122910 *

ETHYLBENZENE/STYRENE PLANTS
Benzene Emissions from the Ethylbenzene/Styrene Industry-Background Information for Proposed Standards
PB80-219686
Benzene Emissions from Ethylbenzene/Styrene Plants - Background Information for Proposal to Withdraw Proposed Standards
PB84-176874 *
National Emissions Standards for Hazardous Air Pollutants; Benzene Emissions from Ethylbenzene/Styrene Plants; Public Hearing.
45 FR 83448 (Dec 18, 1980) *
National Emission Standards for Hazardous Air Pollutants; Benzene Emissions from Maleic Anhydride Plants, Ethylbenzene/Styrene Plants, and Benzene Storage Vessels; Proposed Withdrawal of Proposed Standards
49 FR 8386 (Mar 6, 1984) *
National Emission Standards for Hazardous Air Pollutants; Regulation of Benzene
49 FR 23478 (Jun 6, 1984) *

ETHYLENE DICHLORIDE PLANTS
Field Validation of EPA (Environmental Protection Agency) Reference Method 23
PB83-214551

ETHYLENE DICHLORIDE/VINYL CHLORIDE PLANTS
Standard Support and Environmental Impact Statement: Emission Standard for Vinyl Chloride
PB-249 703
Standard Support and Environmental Impact Statement. Volume 2. Promulgated Emission Standard for Vinyl Chloride
PB-258 827
Vinyl Chloride: A Review of National Emission Standards
PB84-114354
National Emission Standards for Hazardous Air Pollutants, Proposed Standard for Vinyl Chloride
40 FR 59532 (Dec 24, 1975) *
National Emission Standards for Hazardous Air Pollutants, Standard for Vinyl Chloride
41 FR 46561 (Oct 21, 1976) *
National Emission Standards for Hazardous Air Pollutants: Vinyl Chloride
42 FR 28154 (Jun 2, 1977) *

EXPLOSIVES INDUSTRY
Industrial Process Profiles for Environmental Use. Chapter 12. The Explosives Industry
PB-291 641
Gaseous Emissions from Excess Air Combustion of Explosives and Propellants
PB84-161421 *

FABRICATION
Background Information on National Emission Standards for Hazardous Air Pollutants - Proposed Amendments to Standards for Asbestos and Mercury
PB-237 169
Asbestos and Mercury, Proposed Admendments to National Emission Standards for Hazardous Air Pollutants
39 FR 38064 (Oct 25, 1974) *
National Emission Standards for Hazardous Air Pollutants, Amendments to Standards for Asbestos and Mercury
40 FR 48299 (Oct 14, 1975) *

FERTILIZER INDUSTRY
Background Information for Standards of Performence: Phosphate Fertilizer Industry. Volume 1. Proposed Standards
PB-237 606
Background Information for Standards of Performance: Phosphate Fertilizer Industry. Volume 2: Test Data Summary
PB-237 607
Source Assessment: Fertilizer Mixing Plants
PB-253 992
Final Guideline Document: Control of Fluoride Emissions from Existing Phosphate Fertilizer Plants
PB-265 062
Industrial Process Profiles for Environmental Use: Chapter 22. The Phosphate Rock and Basic Fertilizer Materials Industry
PB-281 489
Source Assessment: Chemical and Fertilizer Mineral Industry, State of the Art
PB-285 662
Source Assessment: Phosphate Fertilizer Industry
PB-300 681
Review of New Source Performance Standards for Phosphate Fertilizer Industry - Revised
PB81-122129
Phosphate Fertilizer Plants
41 FR 19585 (May 12, 1976) *
Phosphate Fertilizer Plants
42 FR 12022 (Mar 1, 1977) *

FIBERGLASS MANUFACTURING
Wool Fiberglass Insulation Manufacturing Industry - Background Information for Proposed Standards
PB84-156264 *

FLUOROCARBON-HYDROGEN FLUORIDE INDUSTRY
Industrial Process Profiles for Environmental Use: Chapter 16. The Fluorocarbon-Hydrogen Fluoride Industry
PB-281 483

FOOD INDUSTRY
Status Assessment of Toxic Chemicals: Trichloroethylene
PB80-146426

FORESTRY
Source Assessment: Prescribed Burning, State of the Art
PB80-181472

FOUNDRIES
Background Information-Proposed National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, Mercury
PB-204 876
Background Information on Development of National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, and Mercury
PB-222 802
National Emission Standards for Hazardous Air Pollutants, Proposed Standards for Asbestos, Beryllium, and Mercury
36 FR 23239 (Dec 7, 1971) *
National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, and Mercury
38 FR 8820 (Apr 6, 1973) *

FUGITIVE EMISSIONS SOURCES
VOC Fugitive Emissions in Synthetic Organic Chemicals Manufacturing Industry - Background Information for Proposed Standards
PB81-152167
Fugitive Emission Sources of Organic Compounds - Additional Information on Emissions, Emission Reductions, and Costs
PB82-217126
VOC (Volatile Organic Compounds) Fugitive Emissions in Petroleum Refining Industry - Background Information for Proposed Standards
PB83-157743
VOC Fugitive Emissions in Synthetic Organic Chemicals Manufacturing Industry - Background Information for Promulgated Standards of Performance
PB84-105311
National Emission Standard for Hazardous Air Pollutants; Benzene Fugitive Emissions
46 FR 1165 (Jan 5, 1981) *

FURNITURE INDUSTRY
Surface Coating of Metal Furniture - Background Information for Proposed Standards
PB81-113938
Surface Coating of Metal Furniture - Background Information for Promulgated Standards
PB83-136390

GAS TURBINES
Standards Support and Environmental Impact Statement Volume 1: Proposed Standards of Performance for Stationary Gas Turbines
PB-272 422
Standard Support and Environmental Impact Statement. Volume II: Promulgated Standards of Performance for Stationary Gas Turbines
PB80-126022

GASOLINE MARKETING
Assessment of Human Exposures to Atmospheric Benzene
PB-284 203
Bulk Gasoline Terminals - Background Information for Proposed Standards
PB82-152869
Bulk Gasoline Terminals: Background Information for Promulgated Standards
PB83-256206

GLASS INDUSTRY
Source Assessment: Flat Glass Manufacturing Plants
PB-252 356
Source Assessment: Glass Container Manufacturing Plants
PB-262 002
Source Assessment: Pressed and Blown Glass Manufacturing Plants
PB-273 788
Glass Manufacturing Plants, Background Information: Proposed Standards of Performance. Volume I
PB-298 528
Glass Manufacturing Plants - Background Information for Promulgated Standards of Performance
PB81-105967
Preliminary Study of Sources of Inorganic Arsenic
PB83-153528
Inorganic Arsenic Emissions from Glass Manufacturing Plants: Background Information for Proposed Standards
PB84-152073 *
National Emission Standards for Hazardous Air Pollutants; Proposed Standards for Inorganic Arsenic
48 FR 33112 (Jul 20, 1983) *
National Emission Standards for Hazardous Air Pollutants; Proposed Standards for Inorganic Arsenic
48 FR 55880 (Dec 16, 1983) *
National Emission Standards for Hazardous Air Pollutants; Proposed Standards for Inorganic Arsenic
49 FR 10278 (Mar 20, 1984) *

GRAIN ELEVATORS
Standards Support and Environmental Impact Statement Volume 1: Proposed Standards of Performance for Grain Elevator Industry
PB80-194152
Standards Support and Environmental Impact Statement. Volume 2: Promulgated Standards of Performance for Grain Elevator Industry
PB80-198435
Review of New Source Performance Standards for Grain Elevators
PB84-175744 *

GYPSUM AND WALLBOARD INDUSTRY
Industrial Process Profiles for Environmental Use: Chapter 17. The Gypsum and Wallboard Industry
PB-281 484

HAZARDOUS WASTE DISPOSAL
Background Information-Proposed National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, Mercury
PB-204 876
Background Information on Development of National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, and Mercury
PB-222 802
Background Information on National Emission Standards for Hazardous Air Pollutants - Proposed Amendments to Standards for Asbestos and Mercury
PB-237 169
Destroying Chemical Wastes in Commercial Scale Incinerators
PB-278 816
Burning Waste Chlorinated Hydrocarbons in a Cement Kiln
PB-280 118
Environmental Assessment: At-Sea and Land-Based Incineration of Organochlorine Wastes
PB-283 642
Monitoring for Polychlorinated Biphenyl Emissions from an Electrolytic Capacitor Disposal Project
PB-284 378
Kepone Incineration Test Program
PB-285 000
Technical Assistance in Support of Permitting Activities for the Thermal Destruction of PCBs
PB82-231325
PCB Disposal by Thermal Destruction
PB82-241860
Methods for Assessing Exposure to Windblown Particulates
PB83-177659
Sampling and Analysis Methods for Hazardous Waste Combustion
PB84-155845 *
Gaseous Emissions from Excess Air Combustion of Explosives and Propellants
PB84-161421 *
Profile of Existing Hazardous Waste Incineration Facilities and Manufacturers in the United States
PB84-157072 *

National Emission Standards for Hazardous Air Pollutants, Proposed Standards for Asbestos, Beryllium, and Mercury
36 FR 23239 (Dec 7, 1971) *
National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, and Mercury
38 FR 8820 (Apr 6, 1973) *
Asbestos and Mercury, Proposed Admendments to National Emission Standards for Hazardous Air Pollutants
39 FR 38064 (Oct 25, 1974) *
National Emission Standards for Hazardous Air Pollutants, Amendments to Standards for Asbestos and Mercury
40 FR 48299 (Oct 14, 1975) *
National Emission Standards for Hazardous Air Pollutants; Standards for Radionuclides
48 FR 15076 (Apr 6, 1983) *
National Emission Standards for Hazardous Air Pollutants; Amendments to Asbestos Standard
48 FR 32126 (Jul 13, 1983) *
National Emission Standards for Hazardous Air Pollutants; Amendments to Asbestos Standard
49 FR 13658 (Apr 5, 1984) *
National Emission Standards for Hazardous Air Pollutants; Regulation of Radionuclides
49 FR 43906 (Oct 31, 1984) *

INCINERATORS

Source Assessment: Background Information for Proposed New-Source Performance Standards: Steam Generators, Incinerators, Portland Cement Plants, Nitric Acid Plants, Sulfuric Acid Plants
PB-202 459
Background Information-Proposed National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, Mercury
PB-204 876
Background Information on Development of National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, and Mercury
PB-222 802
Background Information on National Emission Standards for Hazardous Air pollutants - Proposed Amendments to Standards for Asbestos and Mercury
PB-237 169
Methods for Determining the Polychlorinated Biphenyl Emissions from Incineration and Capacitor and Transformer Filling Plants
PB-276 745
Destroying Chemical Wastes in Commercial Scale Incinerators
PB-278 816
Environmental Assessment: At-Sea and Land-Based Incineration of Organochlorine Wastes
PB-283 642
Kepone Incineration Test Program
PB-285 000
A Review of Standards of Performance for New Stationary Sources - Incinerators
PB80-124787
A Review of Standards of Performance for New Stationary Sources - Sewage Sludge Incinerators
PB80-125446
Assessment of Human Exposures to Atmospheric Cadmium
PB80-153885
Thermal Conversion of Municipal Wastewater Sludge, Phase II: Study of Heavy Metal Emissions
PB82-111816
PCB Disposal by Thermal Destruction
PB82-241860
Sampling and Analysis Methods for Hazardous Waste Combustion
PB84-155845 *
Profile of Existing Hazardous Waste Incineration Facilities and Manufacturers in the United States
PB84-157072 *
National Emission Standards for Hazardous Air Pollutants, Proposed Standards for Asbestos, Beryllium, and Mercury
36 FR 23239 (Dec 7, 1971) *
National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, and Mercury
EPA, Research Triangle Park, NC, OAQPS
38 FR 8820 (Apr 6, 1973) *
Asbestos and Mercury, Proposed Admendments to National Emission Standards for Hazardous Air Pollutants
39 FR 38064 (Oct 25, 1974) *
National Emission Standards for Hazardous Air Pollutants, Amendments to Standards for Asbestos and Mercury
40 FR 48299 (Oct 14, 1975) *

INTERNAL COMBUSTION ENGINES

Stationary Internal Combustion Engines. Standards Support and Environmental Impact Statement. Volume I: Proposed Standards of Performance
PB83-113563

IRON AND STEEL INDUSTRY

Source Assessment: Background Information for Proposed New Source Performance Standards: Asphalt Concrete Plants, Petroleum Refineries, Storage Vessels, Secondary Lead Smelters and Refineries, Brass or Bronze Ingot Production Plants, Iron and Steel Plants, Sewage Treatment Plants. Volume I. Main Text
PB-221 736
Background Information for Proposed New Source Performance Standards: Asphalt Concrete Plants, Petroleum Refineries, Storage Vessels, Secondary Lead Smelters and Refineries, Brass or Bronze Ingot Production Plants, Iron and Steel Plants, Sewage Treatment Plants. Volume 2. Appendix: Summaries of Test Data.
PB-229 660
Background Information for New Source Performance Standards: Asphalt Concrete Plants, Petroleum Refineries, Storage Vessels, Secondary Lead Smelters and Refineries, Brass and Bronze Ingot Production Plants, Iron and Steel Plants, and Sewage Treatment Plants. Volume 3. Promulgated Standards
PB-231 601
Background Information for Standards of Performance: Electric Submerged Arc Furnaces for Production of Ferroalloys. Volume I: Proposed Standards
PB-237 411
Background Information for Standards for Performance: Electric Arc Furnaces in the Steel Industry, Volume 1: Proposed Standards
PB-237 840
Background Information for Standards of Performance: Electric Arc Furnaces in the Steel Industry. Volume 2: Test Data Summary
PB-237 841
Background Information for Standards of Performance: Electric Submerged Arc Furnaces for Production of Ferroalloys. Volume 2: Test Data Summary
PB-238 077

Background Information for Standards of Performance: Electric Submerged Arc Furnaces for Production of Ferroalloys. Volume 3: Supplemental Information
PB-252 031
Background Information for an Opacity Standard of Performance for Basic Oxygen Process Furnaces in Iron and Steel Plants
PB-265 479
Industrial Process Profiles for Environmental Use: Chapter 24. The Iron and Steel Industry
PB-266 226
A Review of Standards of Performance for New Stationary Sources-Iron and Steel Plants/Basic Oxygen Furnaces
PB-289 877
Assessment of Human Exposures to Atmospheric Cadmium
PB80-153885
Review of Standards of Performance for Electric Arc Furnaces in Steel Industry
PB80-154602
Electric Arc Furnaces in Ferrous Foundries - Background Information for Proposed Standards
PB80-202997
Review of Standards of Performance for New Stationary Sources - Ferroalloy Production Facilities
PB81-157810
Revised Standards for Basic Oxygen Process Furnaces: Background Information for Proposed Standards
PB83-166488
Multimedia Environmental Assessment of Electric Submerged Arc Furnaces Producing Ferroalloys
PB83-262063 *
Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels in the Steel Industry--Background Information for Proposed Revisions to Standards
PB84-120641
Organic Emissions from Ferrous Metallurgical Industries: Compilation of Emission Factors and Control Technologies
PB84-141548 *
Carcinogen Assessment of Coke Oven Emissions
PB84-170182 *
Benzene Emissions from Coke By-Product Recovery Plants - Background Information for Proposed Standards
PB84-209477 *
Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels in Steel Plants--Background Information for Promulgated Standards of Performance
PB85-124204 *

LEAD INDUSTRY
Industrial Process Profiles for Environmental Use: Chapter 27. Primary Lead Industry
PB81-110926

LEAD SMELTERS
Source Assessment: Background Information for Proposed New Source Performance Standards: Asphalt Concrete Plants, Petroleum Refineries, Storage Vessels, Secondary Lead Smelters and Refineries, Brass or Bronze Ingot Production Plants, Iron and Steel Plants, Sewage Treatment Plants. Volume I. Main Text
PB-221 736
Background Information for Proposed New Source Performance Standards: Asphalt Concrete Plants, Petroleum Refineries, Storage Vessels, Secondary Lead Smelters and Refineries, Brass or Bronze Ingot Production Plants, Iron and Steel Plants, Sewage Treatment Plants. Volume 2. Appendix: Summaries of Test Data.
PB-229 660
Background Information for New Source Performance Standards: Asphalt Concrete Plants, Petroleum Refineries, Storage Vessels, Secondary Lead Smelters and Refineries, Brass and Bronze Ingot Production Plants, Iron and Steel Plants, and Sewage Treatment Plants. Volume 3. Promulgated Standards
PB-231 601
Background Information for New Source Performance Standards: Primary Copper, Zinc, and Lead Smelters. Volume 1: Proposed Standards.
PB-237 832
Status Assessment of Toxic Chemicals: Lead
PB80-146376
A Review of Standards of Performance for New Stationary Sources - Secondary Lead Smelters
PB80-154065
Preliminary Study of Sources of Inorganic Arsenic
PB83-153528

LIME INDUSTRY
Standards Support and Environmental Impact Statement Volume 1: Proposed Standards of Performance for Lime Manufacturing Plants
PB-266 942
Source Assessment: Crushed Limestone, State of the Art
PB-281 422
Industrial Process Profiles for Environmental Use: Chapter 18. The Lime Industry
PB-281 485
Standards Support (Final) and Environmental Impact Statement. Volume II: Promulgated Standards of Performance for Lime Manufacturing Plants
PB80-194491
Environmental Impact Statement for Lime Manufacturing Plants: Background Information for Promulgated Standards
PB84-191543 *

MACHINE SHOPS
Background Information-Proposed National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, Mercury
PB-204 876
Background Information on Development of National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, and Mercury
PB-222 802
National Emission Standards for Hazardous Air Pollutants, Proposed Standards for Asbestos, Beryllium, and Mercury
36 FR 23239 (Dec 7, 1971) *
National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, and Mercury
38 FR 8820 (Apr 6, 1973) *

MALEIC ANHYDRIDE PLANTS
Benzene Emissions from Maleic Anhydride Industry - Background Information for Proposed Standards
PB80-152812
Benzene Emissions from Maleic Anhydride Plants: Background Information for Proposal to Withdraw Proposed Standards
PB84-170174 *

National Emission Standard for Hazardous Air Pollutants; Benzene Emissions from Maleic Anhydride Plants
45 FR 26660 (Apr 18, 1980) *
National Emission Standards for Hazardous Air Pollutants; Benzene Emissions from Maleic Anhydride Plants, Ethylbenzene/Styrene Plants, and Benzene Storage Vessels; Proposed Withdrawal of Proposed Standards
49 FR 8386 (Mar 6, 1984) *
National Emission Standards for Hazardous Air Pollutants; Regulation of Benzene
49 FR 23478 (Jun 6, 1984) *

MANUFACTURING ASBESTOS PRODUCTS

Background Information-Proposed National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, Mercury
PB-204 876
Background Information on Development of National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, and Mercury
PB-222 802
Background Information on National Emission Standards for Hazardous Air Pollutants - Proposed Amendments to Standards for Asbestos and Mercury
PB-237 169
National Emission Standards for Hazardous Air Pollutants, Proposed Standards for Asbestos, Beryllium, and Mercury
36 FR 23239 (Dec 7, 1971) *
National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, and Mercury
38 FR 8820 (Apr 6, 1973) *
Asbestos and Mercury, Proposed Admendments to National Emission Standards for Hazardous Air Pollutants
39 FR 38064 (Oct 25, 1974) *
National Emission Standards for Hazardous Air Pollutants; Amendments to Asbestos Standard
48 FR 32126 (Jul 13, 1983) *
National Emission Standards for Hazardous Air Pollutants, Amendments to Standards for Asbestos and Mercury
40 FR 48299 (Oct 14, 1975) *
National Emission Standards for Hazardous Air Pollutants; Amendments to Asbestos Standard
49 FR 13658 (Apr 5, 1984) *

MANUFACTURING RADIONUCLIDE PRODUCTS

National Emission Standards for Hazardous Air Pollutants; Standards for Radionuclides
48 FR 15076 (Apr 6, 1983) *
National Emission Standards for Hazardous Air Pollutants; Regulation of Radionuclides
49 FR 43906 (Oct 31, 1984) *

MERCURY ORE PROCESSING

Background Information-Proposed National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, Mercury
PB-204 876
Background Information on Development of National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, and Mercury
PB-222 802
National Emission Standards for Hazardous Air Pollutants, Proposed Standards for Asbestos, Beryllium, and Mercury
36 FR 23239 (Dec 7, 1971) *
National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, and Mercury
38 FR 8820 (Apr 6, 1973) *

METAL INDUSTRY

Background Information-Proposed National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, Mercury
PB-204 876
Source Assessment: Background Information for Proposed New Source Performance Standards: Asphalt Concrete Plants, Petroleum Refineries, Storage Vessels, Secondary Lead Smelters and Refineries, Brass or Bronze Ingot Production Plants, Iron and Steel Plants, Sewage Treatment Plants. Volume I. Main Text
PB-221 736
Background Information on Development of National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, and Mercury
PB-222 802
Background Information for Proposed New Source Performance Standards: Asphalt Concrete Plants, Petroleum Refineries, Storage Vessels, Secondary Lead Smelters and Refineries, Brass or Bronze Ingot Production Plants, Iron and Steel Plants, Sewage Treatment Plants. Volume 2. Appendix: Summaries of Test Data.
PB-229 660
Background Information for New Source Performance Standards: Asphalt Concrete Plants, Petroleum Refineries, Storage Vessels, Secondary Lead Smelters and Refineries, Brass and Bronze Ingot Production Plants, Iron and Steel Plants, and Sewage Treatment Plants. Volume 3. Promulgated Standards
PB-231 601
Background Information for Standards of Performance: Primary Aluminum Industry. Volume I: Proposed Standards
PB-237 612
Background Information for Standards of Performance: Primary Aluminum Industry. Volume I: Test Data Summary
PB-237 613
Background Information for Standards for Performance: Electric Arc Furnaces in the Steel Industry, Volume 1: Proposed Standards
PB-237 840
Industrial Process Profiles for Environmental Use: Chapter 25. Primary Aluminum Industry
PB-281 491
Industrial Process Profiles for Environmental Use: Chapter 26. Titanium Industry
PB-281 492
Primary Aluminum: Draft Guidelines for Control of Fluoride Emissions from Existing Primary Aluminum Plants
PB-294 938
A Review of Standards for New Stationary Sources - Secondary Brass and Bronze Plants
PB-296 953
Primary Aluminum: Guidelines for Control of Fluoride Emissions from Existing Primary Aluminum Plants
PB80-153935
Primary Aluminum - Background Information for Promulgated Amendments
PB80-192479
Industrial Process Profiles for Environmental Use: Chapter 28. Primary Zinc Industry
PB80-225717
Industrial Process Profiles for Environmental Use: Chapter 27. Primary Lead Industry
PB81-110926

Metal Coil Surface Coating Industry - Background Information for Proposed Standards
PB81-123572
Industrial Process Profiles for Environmental Use: Chapter 29. Primary Copper Industry
PB81-164915
Primary Aluminum. Background Information: Proposed Amendments
PB82-242611
Metallic Mineral Processing Plants - Background Information for Proposed Standards, Volume 1, Chapters 1-9
PB83-113746
Metallic Mineral Processing Plants - Background Information for Proposed Standards. Volume 2: Appendices
PB83-114280 *
Metal Coil Surface Coating Industry - Background Information for Promulgated Standards
PB83-124867
Organic Emissions from Ferrous Metallurgical Industries: Compilation of Emission Factors and Control Technologies
PB84-141548 *
Metallic Mineral Processing Plants - Background Information for Promulgated Standards
PB84-164060 *
National Emission Standards for Hazardous Air Pollutants, Proposed Standards for Asbestos, Beryllium, and Mercury
36 FR 23239 (Dec 7, 1971) *
National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, and Mercury
38 FR 8820 (Apr 6, 1973) *

MICA INDUSTRY
Industrial Process Profiles for Environmental Use: Chapter 20. The Mica Industry
PB-281 487

MICROELECTRONICS INDUSTRY
Industrial Process Profiles for Environmental Use: Chapter 30. The Electronic Component Manufacturing Industry
PB83-199190

MILLING
Background Information-Proposed National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, Mercury
PB-204 876
Background Information on Development of National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, and Mercury
PB-222 802
National Emission Standards for Hazardous Air Pollutants, Proposed Standards for Asbestos, Beryllium, and Mercury
36 FR 23239 (Dec 7, 1971) *
National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, and Mercury
38 FR 8820 (Apr 6, 1973) *
National Emission Standards for Hazardous Air Pollutants; Amendments to Asbestos Standard
48 FR 32126 (Jul 13, 1983) *
National Emission Standards for Hazardous Air Pollutants; Amendments to Asbestos Standard
49 FR 13658 (Apr 5, 1984) *
National Emission Standards for Hazardous Air Pollutants; Standards for Radon-222 Emissions from Licensed Uranium Mills
49 FR 43916 (Oct 31, 1984) *

MINERAL INDUSTRY
Industrial Process Profiles for Environmental Use: Chapter 20. The Mica Industry
PB-281 487
Source Assessment: Crushed Sandstone, Quartz, and Quartzite, State of the Art
PB-285 210
Metallic Mineral Processing Plants - Background Information for Proposed Standards, Volume 1, Chapters 1-9
PB83-113746
Metallic Mineral Processing Plants - Background Information for Proposed Standards. Volume 2: Appendices
PB83-114280 *
Background Information Document Proposed Standards for Radionuclides
PB83-192385
Draft Environmental Impact Statement. Nonmetallic Mineral Processing Plants: Background Information for Proposed Standards
PB83-258103
Metallic Mineral Processing Plants - Background Information for Promulgated Standards
PB84-164060 *

MINING
Source Assessment: Crushed Stone
PB-284 029
Source Assessment: Coal Refuse Piles, Abandoned Mines and Outcrops, State of the Art
PB-288 210
Source Assessment: Open Mining of Coal, State of the Art
PB-288 497
Background Information Document Proposed Standards for Radionuclides
PB83-192385
National Emission Standards for Hazardous Air Pollutants; Standards for Radionuclides
48 FR 15076 (Apr 6, 1983) *
National Emission Standards for Hazardous Air Pollutants; Regulation of Radionuclides
49 FR 43906 (Oct 31, 1984) *
National Emission Standards for Hazardous Air Pollutants; Standards for Radon-222 Emissions from Underground Uranium Mines
49 FR 43915 (Oct 31, 1984) *

NITRIC ACID PLANTS
Source Assessment: Background Information for Proposed New-Source Performance Standards: Steam Generators, Incinerators, Portland Cement Plants, Nitric Acid Plants, Sulfuric Acid Plants
PB-202 459
A Review of Standards of Performance for New Stationary Sources - Nitric Acid Plants
PB-294 962

NONMETALLIC MINERAL INDUSTRY
Source Assessment: Chemical and Fertilizer Mineral Industry, State of the Art
PB-285 662
Draft Environmental Impact Statement. Nonmetallic Mineral Processing Plants: Background Information for Proposed Standards
PB83-258103

NUCLEAR POWER PLANTS
National Emission Standards for Hazardous Air Pollutants; Standards for Radionuclides
48 FR 15076 (Apr 6, 1983) *
National Emission Standards for Hazardous Air Pollutants; Regulation of Radionuclides
49 FR 43906 (Oct 31, 1984) *

NUCLEAR RESEARCH AND DEVELOPMENT
National Emission Standards for Hazardous Air Pollutants; Standards for Radionuclides
48 FR 15076 (Apr 6, 1983) *
National Emission Standards for Hazardous Air Pollutants; Regulation of Radionuclides
49 FR 43906 (Oct 31, 1984) *

OIL AND GAS INDUSTRY
Source Assessment: Industrial Process Profiles for Environmental Use: Chapter 2. Oil and Gas Production Industry
PB-291 639
SO2 Emissions in Natural Gas Production Standards: Background Information for Proposed Standards
PB84-151446 *
Environmental Assessment: Source Test and Evaluation Report - Rectisol Acid Gas Removal
PB84-153238 *
Equipment Leaks of VOC (Volatile Organic Compounds) in Natural Gas Production Industry - Background Information for Proposed Standards
PB84-155126 *

OPEN BURNING
Source Assessment: Agricultural Opening Burning, State of the Art
PB-270 240
Source Assessment: Prescribed Burning, State of the Art
PB80-181472

PESTICIDE MANUFACTURING
Industrial Process Profiles for Environmental Use: Chapter 8. Pesticides Industry
PB-266 225
Source Assessment: Pesticide Manufacturing Air Emissions - Overview and Prioritization
PB-279 171
Development of Information on Pesticides Manufacturing for Source Assessment
PB-283 051

PETROCHEMICAL INDUSTRY
Industrial Process Profiles for Environmental Use: Chapter 5. Basic Petrochemicals Industry
PB-266 224
Industrial Process Profiles for Environmental Use: Chapter 6. The Industrial Organic Chemicals Industry
PB-281 478

PETROLEUM REFINERIES
Source Assessment: Background Information for Proposed New Source Performance Standards: Asphalt Concrete Plants, Petroleum Refineries, Storage Vessels, Secondary Lead Smelters and Refineries, Brass or Bronze Ingot Production Plants, Iron and Steel Plants, Sewage Treatment Plants. Volume I. Main Text
PB-221 736
Background Information for Proposed New Source Performance Standards: Asphalt Concrete Plants, Petroleum Refineries, Storage Vessels, Secondary Lead Smelters and Refineries, Brass or Bronze Ingot Production Plants, Iron and Steel Plants, Sewage Treatment Plants. Volume 2. Appendix: Summaries of Test Data.
PB-229 660
Background Information for New Source Performance Standards: Asphalt Concrete Plants, Petroleum Refineries, Storage Vessels, Secondary Lead Smelters and Refineries, Brass and Bronze Ingot Production Plants, Iron and Steel Plants, and Sewage Treatment Plants. Volume 3. Promulgated Standards
PB-231 601
Standards Support and Environmental Impact Statement Volume 1: Proposed Standards of Performance for Petroleum Refinery Sulfur Recovery Plants
PB-257 975
Industrial Process Profiles for Environmental Use: Chapter 3. Petroleum Refining Industry
PB-273 649
Standards Support and Environmental Impact Statement Volume II: Promulgated Standards of Performance for Petroleum Refinery Sulfur Recovery Plants
PB-278 163
Assessment of Human Exposures to Atmospheric Benzene
PB-284 203
A Review of Standards of Performance for New Stationary Sources - Petroleum Refineries
PB-300 480
Benzene Emissions from Benzene Storage Tanks - Background Information for Proposed Standards
PB81-151433
Benzene Fugitive Emissions - Background Information for Proposed Standards
PB81-151664
VOC (Volatile Organic Compounds) Fugitive Emissions in Petroleum Refining Industry - Background Information for Proposed Standards
PB83-157743
Review of New Source Performance Standards for Petroleum Refinery Claus Sulfur Recovery Plants
PB84-101898 *
Draft Environmental Impact Statement Sulfur Oxides Emissions from Fluid Catalytic Cracking Unit Regenerators: Background Information for Proposed Standards
PB84-143254 *
Environmental Assessment: Source Test and Evaluation Report - Rectisol Acid Gas Removal
PB84-153238 *
Benzene Emissions from Benzene Storage Tanks: Background Information for Proposal to Withdraw Proposed Standards
PB84-167683 *
Benzene Fugitive Emissions - Background Information for Promulgated Standards
PB84-210301 *
VOC Emissions from Volatile Organic Liquid Storage Tanks - Background Information for Proposed Standards
PB84-237320 *
National Emission Standard for Hazardous Air Pollutants; Benzene Fugitive Emissions
46 FR 1165 (Jan 5, 1981) *

PHARMACEUTICAL INDUSTRY
National Emission Standards for Hazardous Air Pollutants; Standards for Radionuclides
48 FR 15076 (Apr 6, 1983) *
National Emission Standards for Hazardous Air Pollutants; Regulation of Radionuclides
49 FR 43906 (Oct 31, 1984) *

PHENOL MANUFACTURING
Source Assessment: Manufacture of Acetone and Phenol from Cumene
PB80-150592

PHOSPHATE INDUSTRY
Industrial Process Profiles for Environmental Use: Chapter 22. The Phosphate Rock and Basic Fertilizer Materials Industry
PB-281 489
Phosphate Rock Plants - Background Information for Proposed Standards
PB80-141625

Phosphate Rock Plants - Background Information for Promulgated Standards
PB82-200460
Background Information Document Proposed Standards for Radionuclides
PB83-192385
National Emission Standards for Hazardous Air Pollutants; Standards for Radionuclides
48 FR 15076 (Apr 6, 1983) *
National Emission Standards for Hazardous Air Pollutants; Regulation of Radionuclides
49 FR 43906 (Oct 31, 1984) *

PHTHALIC ANHYDRIDE MANUFACTURING
Source Assessment: Phthalic Anhydride (Air Emissions)
PB-266 797

PLASTICIZER INDUSTRY
Industrial Process Profiles for Environmental Use: Chapter 13, Plasticizers Industry
PB-291 642

PLASTICS INDUSTRY
Source Assessment: Plastics Processing, State of the Art
PB-280 926
Industrial Process Profiles for Environmental Use: Chapter 10. Plastics and Resins Industry
PB-291 640
Status Assessment of Toxic Chemicals: Acrylonitrile
PB80-146301

PLUTONIUM MANUFACTURING
National Emission Standards for Hazardous Air Pollutants; Standards for Radionuclides
48 FR 15076 (Apr 6, 1983) *
National Emission Standards for Hazardous Air Pollutants; Regulation of Radionuclides
49 FR 43906 (Oct 31, 1984) *

POLYCHLOROPRENE MANUFACTURING
Source Assessment: Polychloroprene. State of the Art
PB-278 777

POLYVINYL CHLORIDE PLANTS
Standard Support and Environmental Impact Statement: Emission Standard for Vinyl Chloride
PB-249 703
Standard Support and Environmental Impact Statement. Volume 2. Promulgated Emission Standard for Vinyl Chloride
PB-258 827
Source Assessment: Polyvinyl Chloride
PB-283 395
National Emission Standards for Hazardous Air Pollutants, Proposed Standard for Vinyl Chloride
40 FR 59532 (Dec 24, 1975) *
National Emission Standards for Hazardous Air Pollutants, Standard for Vinyl Chloride
41 FR 46561 (Oct 21, 1976) *
National Emission Standards for Hazardous Air Pollutants: Vinyl Chloride
42 FR 28154 (Jun 2, 1977) *

PRINTING
Publication Rotogravure Printing - Background Information for Proposed Standards
PB81-117145
Publication Rotogravure Printing - Background Information for Promulgated Standards
PB83-142612
Flexible Vinyl Coating and Printing Operations - Background Information for Proposed Standards
PB83-169136

PULP MILLS
Standard Support and Environmental Impact Statement Volume 1: Proposed Standards of Performance for Kraft Pulp Mills
PB-258 007
Draft Guideline Document: Control of TRS Emissions from Existing Kraft Pulp Mills
PB-278 135
Standards Support and Environmental Impact Statement Volume II: Promulgated Standards of Performance for Kraft Pulp Mills
PB-278 160
Kraft Pulping - Control of TRS Emissions from Existing Mills
PB-296 135
Kraft Pulp Mills, Draft Guideline Document: Availability
43 FR 7597 (Feb 23, 1978) *
Kraft Pulp Mills, Final Guideline Document; Availability
44 FR 29828 (May 22, 1979) *

RESINS INDUSTRY
Industrial Process Profiles for Environmental Use: Chapter 10. Plastics and Resins Industry
PB-291 640

ROADWAY SURFACING
Background Information-Proposed National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, Mercury
PB-204 876
Background Information on Development of National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, and Mercury
PB-222 802
National Emission Standards for Hazardous Air Pollutants, Proposed Standards for Asbestos, Beryllium, and Mercury
36 FR 23239 (Dec 7, 1971) *
National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, and Mercury
38 FR 8820 (Apr 6, 1973) *
National Emission Standards for Hazardous Air Pollutants; Amendments to Asbestos Standard
48 FR 32126 (Jul 13, 1983) *
National Emission Standards for Hazardous Air Pollutants; Amendments to Asbestos Standard
49 FR 13658 (Apr 5, 1984) *

ROCKET MOTOR FIRING
Background Information-Proposed National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, Mercury
PB-204 876
Background Information on Development of National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, and Mercury
PB-222 802
National Emission Standards for Hazardous Air Pollutants, Proposed Standards for Asbestos, Beryllium, and Mercury
36 FR 23239 (Dec 7, 1971) *
National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, and Mercury
38 FR 8820 (Apr 6, 1973) *

ROOFING
Asphalt Roofing Manufacturing Industry - Background Information for Proposed Standards.
PB80-212111
Asphalt Roofing Manufacturing Industry - Background Information for Promulgated Standards
PB82-257726

RUBBER INDUSTRY
Source Assessment: Rubber Processing, State of the Art
PB-281 423
Industrial Process Profiles for Environmental Use: Chapter 9. The Synthetic Rubber Industry
PB-281 480
Rubber Tire Manufacturing Industry - Background Information for Proposed Standards
PB83-163543

SEWAGE SLUDGE INCINERATORS
Background Information on National Emission Standards for Hazardous Air pollutants - Proposed Amendments to Standards for Asbestos and Mercury
PB-237 169
A Review of Standards of Performance for New Stationary Sources - Sewage Sludge Incinerators
PB80-125446
Thermal Conversion of Municipal Wastewater Sludge, Phase II: Study of Heavy Metal Emissions
PB92-111816
Asbestos and Mercury, Proposed Admendments to National Emission Standards for Hazardous Air Pollutants
39 FR 38064 (Oct 25, 1974) *
National Emission Standards for Hazardous Air Pollutants, Amendments to Standards for Asbestos and Mercury
40 FR 48299 (Oct 14, 1975) *

SEWAGE TREATMENT PLANTS
Background Information for Proposed New Source Performance Standards: Asphalt Concrete Plants, Petroleum Refineries, Storage Vessels, Secondary Lead Smelters and Refineries, Brass or Bronze Ingot Production Plants, Iron and Steel Plants, Sewage Treatment Plants. Volume 2. Appendix: Summaries of Test Data.
PB-229 660
Background Information for New Source Performance Standards: Asphalt Concrete Plants, Petroleum Refineries, Storage Vessels, Secondary Lead Smelters and Refineries, Brass and Bronze Ingot Production Plants, Iron and Steel Plants, and Sewage Treatment Plants. Volume 3. Promulgated Standards
PB-231 601
Source Assessment: Background Information for Proposed New Source Performance Standards: Asphalt Concrete Plants, Petroleum Refineries, Storage Vessels, Secondary Lead Smelters and Refineries, Brass or Bronze Ingot Production Plants, Iron and Steel Plants, Sewage Treatment Plants. Volume I. Main Text
PB-221 736

SMELTERS
Source Assessment: Background Information for Proposed New Source Performance Standards: Asphalt Concrete Plants, Petroleum Refineries, Storage Vessels, Secondary Lead Smelters and Refineries, Brass or Bronze Ingot Production Plants, Iron and Steel Plants, Sewage Treatment Plants. Volume I. Main Text
PB-221 736
Background Information for Proposed New Source Performance Standards: Asphalt Concrete Plants, Petroleum Refineries, Storage Vessels, Secondary Lead Smelters and Refineries, Brass or Bronze Ingot Production Plants, Iron and Steel Plants, Sewage Treatment Plants. Volume 2. Appendix: Summaries of Test Data.
PB-229 660
Background Information for New Source Performance Standards: Asphalt Concrete Plants, Petroleum Refineries, Storage Vessels, Secondary Lead Smelters and Refineries, Brass and Bronze Ingot Production Plants, Iron and Steel Plants, and Sewage Treatment Plants. Volume 3. Promulgated Standards
PB-231 601
Background Information for New Source Performance Standards: Primary Copper, Zinc, and Lead Smelters. Volume 1: Proposed Standards.
PB-237 832
A Review of Standards for New Stationary Sources - Secondary Brass and Bronze Plants
PB-296 953
Status Assessment of Toxic Chemicals: Cadmium
PB80-146350
Status Assessment of Toxic Chemicals: Lead
PB80-146376
Assessment of Human Exposures to Atmospheric Cadmium
PB80-153885
A Review of Standards of Performance for New Stationary Sources - Secondary Lead Smelters
PB80-154065
Preliminary Study of Sources of Inorganic Arsenic
PB83-153528
Inorganic Arsenic Emissions from High-Arsenic Primary Copper Smelters - Background Information for Proposed Standards
PB83-234120
Inorganic Arsenic Emissions from Low-Arsenic Primary Copper Smelters - Background Information for Proposed Standards
PB83-234138
Review of New Source Performance Standards for Primary Copper Smelters: Chapters 1 through 9
PB84-179951 *
Review of New Source Performance Standards for Primary Copper Smelters: Appendices
PB84-179969 *
National Emission Standards for Hazardous Air Pollutants; Proposed Standards for Inorganic Arsenic
48 FR 33112 (Jul 20, 1983) *
National Emission Standards for Hazardous Air Pollutants; Proposed Standards for Inorganic Arsenic
48 FR 55880 (Dec 16, 1983) *
National Emission Standards for Hazardous Air Pollutants; Proposed Standards for Inorganic Arsenic
49 FR 10278 (Mar 20, 1984) *

SODIUM CARBONATE PLANTS
Sodium Carbonate Industry - Background Information for Proposed Standards
PB80-219678

SOLVENT CLEANING FACILITIES
Organic Solvent Cleaners - Background Information for Proposed Standards
PB80-137912

SOLVENT RECLAMATION
Source Assessment: Reclaiming of Waste Solvents, State of the Art
PB-282 934

STORAGE TANKS
Benzene Emissions from Benzene Storage Tanks - Background Information for Proposed Standards
PB81-151433
Benzene Emissions from Benzene Storage Tanks: Background Information for Proposal to Withdraw Proposed Standards
PB84-167683 *

VOC Emissions from Volatile Organic Liquid Storage Tanks - Background Information for Proposed Standards
PB84-237320 *
Benzene Emissions from Cenzene Storage Vessels; National Emission Standard for Hazardous Air Pollutants; Hearing
45 FR 83952 (Dec 19, 1980) *
National Emission Standards for Hazardous Air Pollutants; Benzene Emissions from Benzene Storage Vessels
47 FR 53059 (Nov 24, 1982) *
National Emission Standards for Hazardous Air Pollutants; Benzene Emissions from Maleic Anhydride Plants, Ethylbenzene/Styrene Plants, and Benzene Storage Vessels; Proposed Withdrawal of Proposed Standards
49 FR 8386 (Mar 6, 1984) *
National Emission Standards for Hazardous Air Pollutants; Regulation of Benzene
49 FR 23478 (Jun 6, 1984) *

SULFUR INDUSTRY
Industrial Process Profiles for Environmental Use: Chapter 23. Sulfur, Sulfur Oxides and Sulfuric Acid
PB-281 490

SULFUR RECOVERY PLANTS
Standards Support and Environmental Impact Statement Volume 1: Proposed Standards of Performance for Petroleum Refinery Sulfur Recovery Plants
PB-257 975
Standards Support and Environmental Impact Statement Volume II: Promulgated Standards of Performance for Petroleum Refinery Sulfur Recovery Plants
PB-278 163
Review of New Source Performance Standards for Petroleum Refinery Claus Sulfur Recovery Plants
PB84-101898 *

SULFURIC ACID PLANTS
Source Assessment: Background Information for Proposed New-Source Performance Standards: Steam Generators, Incinerators, Portland Cement Plants, Nitric Acid Plants, Sulfuric Acid Plants
PB-202 459
Final Guideline Document: Control of Sulfuric Acid
Mist Emissions from Existing Sulfuric Acid Production Units
PB-274 085
A Review of Standards of Performance for New Stationary Sources-Sulfuric Acid Plants
PB-292 278
Standards of Performance for New Stationary Sources, Emission Guidelines for the Control of Sulfuric Acid Mist from Existing Sulfuric Acid Production Units
41 FR 48706 (Nov 4, 1976) *
Standards of Performance for New Stationary Sources, Emission Guideline for Sulfuric Acid Mist
42 FR 55796 (Oct 18, 1977) *

SYNTHETIC FIBER INDUSTRY
Industrial Process Profiles for Environmental Use: Chapter 11. The Synthetic Fiber Industry
PB-281 481
Final Environmental Impact Statement Synthetic Fiber Production Facilities: Background Information Promulgated Standards
PB84-181825 *

TEXTILE INDUSTRY
Source Assessment: Overview and Prioritization of Emissions from Textile Manufacturing
PB-271 986
Industrial Process Profiles for Environmental Use: Chapter 11. The Synthetic Fiber Industry
PB-281 481
Status Assessment of Toxic Chemicals: Polybrominated Biphenyls
PB80-146400
Status Assessment of Toxic Chemicals: Trichloroethylene
PB80-146426
Status Assessment of Toxic Chemicals: Tris(2,3-Dibromopropyl) Phosphate
PB80-146434
Source Assessment: Cotton and Synthetic Woven Fabric Finishing
PB81-161937
Synthetic Fiber Production Facilities - Background Information for Proposed Standards
PB83-153015
Final Environmental Impact Statement Synthetic Fiber Production Facilities: Background Information Promulgated Standards
PB84-181825 *

TIRE MANUFACTURING
Rubber Tire Manufacturing Industry - Background Information for Proposed Standards
PB83-163543

TITANIUM INDUSTRY
Industrial Process Profiles for Environmental Use: Chapter 26. Titanium Industry
PB-281 492

UREA MANUFACTURING
Source Assessment: Urea Manufacture
PB-274 367

ZINC INDUSTRY
Industrial Process Profiles for Environmental Use: Chapter 28. Primary Zinc Industry
PB80-225717

ZINC SMELTERS
Background Information for New Source Performance Standards: Primary Copper, Zinc, and Lead Smelters. Volume 1: Proposed Standards.
PB-237 832
Preliminary Study of Sources of Inorganic Arsenic
PB83-153528

PART 3. EPA REPORT AND FEDERAL REGISTER NOTICE ENTRIES

SAMPLE ENTRIES

Report entries are arranged numerically by National Technical Information Service (NTIS) order number. A sample report entry follows:

PB84-189646 * PC A05/MF A01	NTIS Order Number Price Codes
Method for Collection and Analysis of Chlorobenzenes	Report Title
EPA, Research Triangle Park, NC, ESRL	EPA Sponsoring Office
Monsanto Company	Corporate Author
G. W. Wooten, et al.	Personal Authors
Jun 84, 39 p, EPA-600/3-84-058	Date, Pages, Report Number
To measure individual exposures to potentially hazardous organic compounds including halogenated hydrocarbons and benzene, personal monitors were developed . . .	Abstract
Descriptors: Source sampling/ambient monitoring methodology, Chlorobenzenes	Descriptors

Federal Register notices are arranged chronologically by volume and page number following the EPA report entries. A sample *Federal Register* notice entry follows:

46 FR 1165 (Jan 5, 1981) *	*FR* citation (volume, beginning page, date)
National Emission Standard for Hazardous Air Pollutants; Benzene Fugitive Emissions	Title
EPA, Research Triangle Park, NC, OAQPS	EPA Issuing Office
Proposed rule and notice of public hearing. The proposed standard would limit benzene emissions . . .	Action/Abstract
Descriptors: *FR* notice, Benzene, Fugitive emissions sources, . . .	Descriptors

An asterisk (*) indicates that the entry is new to this edition of the *Bibliography*.

KEY TO EPA OFFICE ABBREVIATIONS

ECAO	Environmental Criteria and Assessment Office
EMSL	Environmental Monitoring Systems Laboratory
ESRL	Environmental Sciences Research Laboratory
IERL	Industrial Environmental Research Laboratory
MERL	Municipal Environmental Research Laboratory
OAP	Office of Air Programs
OAQPS	Office of Air Quality Planning and Standards
OER	Office of Exploratory Research
OHEA	Office of Health and Environmental Assessment
ORD	Office of Research and Development
ORP	Office of Radiation Programs
OTS	Office of Toxic Substances

ORDERING INFORMATION

All reports listed in the main body of the bibliography are available from the National Technical Information Service (NTIS). To order documents, return the order form (located at the back of this report) along with payment to the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161. Prices for documents are indicated in each entry by a price code for paper copy and for microfiche. Prices include normal postage and handling. The Price Code Schedule effective for the calendar year 1985 follows.

NTIS PRICE CODE SCHEDULE
Standard Priced Documents and Microfiche
North American Prices
Effective January 1, 1985

Price Code	Price Range	Price
A01	Microfiche	$ 4.50
A02	001 - 025	7.00
A03	026 - 050	8.50
A04	051 - 075	10.00
A05	076 - 100	11.50
A06	101 - 125	13.00
A07	126 - 150	14.50
A08	151 - 175	16.00
A09	176 - 200	17.50
A10	201 - 225	19.00
A11	226 - 250	20.50
A12	251 - 275	22.00
A13	276 - 300	23.50
A14	301 - 325	25.00
A15	326 - 350	26.50
A16	351 - 375	28.00
A17	376 - 400	29.50
A18	401 - 425	31.00
A19	426 - 450	32.50
A20	451 - 475	34.00
A21	476 - 500	35.50
A22	501 - 525	37.00
A23	526 - 550	38.50
A24	551 - 575	40.00
A25	576 - 600	41.50
A99	601 & Up	1/

1/ Add $1.50 for each additional page increment, or portion thereof.

All Federal Register notices listed are available from the U.S. Government Printing Office. The charge for individual copies is $1.50 for each issue, or $1.50 for each group of pages as actually bound. Remit check or money order, made payable to the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

PB-202 459 PC A04/MF A01
Source Assessment: Background Information for Proposed New-Source Performance Standards: Steam Generators, Incinerators, Portland Cement Plants, Nitric Acid Plants, Sulfuric Acid Plants
EPA, Research Triangle Park, NC, OAP
Aug 71, 61p, APTD-0711

Standards of performance for new stationary sources are established under Section 111 of the Clean Air Act. For each industrial or source category, EPA sets individual emissions standards, designations of affected facilities, monitoring requirements, and test methods and procedures. Two types of documents, the proposed background information document (BID) and the promulgation BID, are associated with the development of each NSPS. The proposal BID summarizes information gathered on the industry being regulated and discusses possible control technologies. A number of regulatory alternatives are presented. Generally, each alternative contains a different control technology. The economic, environmental and energy impacts of each alternative are analyzed in the proposal BID. After an alternative has been selected and a standard proposed, the promulgation BID is written. This BID contains a summary of all public comments made on the proposed standard and the EPA Administrator's response to the comments. It also describes any changes made to the standard since proposal. In addition, it contains the final environmental impact statement, which summarizes the impact of the standard. In addition to the background information documents, a review document is usually generated after EPA completes its periodic review of the promulgated standard.

Descriptors: NSPS, Chemical industry, Cement industry, Incinerators, Boilers, Nitric acid plants, Sulfuric acid plants, Electric power plants, Combustion

PB-204 876 PC A03/MF A01
Background Information-Proposed National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, Mercury
EPA, Research Triangle Park, NC, OAP
Dec 71, 30p, ADTD-0753

For asbestos, beryllium, and mercury, proposed national air pollution standards are summarized. Reviews are presented for the following: the effects on health; the nature of the problem; the development of the proposed standard; and, its economic impact. A report on atmospheric dispersion estimates is appended.

Descriptors: NESHAP, Asbestos, Beryllium, Mercury, Milling, Manufacturing asbestos products, Construction, Buildings and structures, Roadway surfacing, Demolition and renovating, Machine shops, Ceramic plants, Foundries, Rocket motor firing, Incinerators, Hazardous waste disposal, Metal industry, Mercury ore processing, Chlor-alkali plants, Chemical industry

PB-221 736 PC A05/MF A01
Source Assessment: Background Information for Proposed New Source Performance Standards: Asphalt Concrete Plants, Petroleum Refineries, Storage Vessels, Secondary Lead Smelters and Refineries, Brass or Bronze Ingot Production Plants, Iron and Steel Plants, Sewage Treatment Plants. Volume I. Main Text
EPA, Research Triangle Park, NC, OAP
Jun 73, 79p, APTD-1352A

Abstract: See PB-202 459

Descriptors: NSPS, Asphalt industry, Concrete plants, Petroleum refineries, Smelters, Metal industry, Iron and steel industry, Sewage treatment plants, Lead smelters, Brass and bronze plants

PB-222 802 PC A06/MF A01
Background Information on Development of National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, and Mercury
EPA, Research Triangle Park, NC, OAP
Mar 73, 104p, APTD-1503

The document provides a detailed discussion of the statements made in the preamble to the National Emission Standards for Hazardous Air Pollutants (asbestos, beryllium, and mercury). The first section of this report covering general provisions discusses: Applicability of the standards; Approval of construction or modification; Notification of startup; Waiver of compliance; Source reporting; Source sampling and analytical methods. The three remaining sections discuss the following areas for each of the three pollutants, asbestos, beryllium and mercury: (1) health effects; (2) development of the standard; (3) evaluation of comments; (4) environmental iupact.

Descriptors: NESHAP, Asbestos, Beryllium, Mercury Milling, Manufacturing asbestos products, Construction, Buildings and structures, Roadway surfacing, Demolition and renovating, Machine shops, Ceramic plants, Foundries, Rocket motor firing, Incinerators, Hazardous waste disposal, Metal industry, Mercury ore processing, Chlor-alkali plants, Chemical industry

PB-229 660 PC A04/MF A01
Background Information for Proposed New Source Performance Standards: Asphalt Concrete Plants, Petroleum Refineries, Storage Vessels, Secondary Lead Smelters and Refineries, Brass or Bronze Ingot Production Plants, Iron and Steel Plants, Sewage Treatment Plants. Volume 2. Appendix: Summaries of Test Data.
EPA, Research Triangle Park, NC, OAP
Jun 73, 71p, ADTD-1352B

Abstract: See PB-202 459

Descriptors: NSPS, Asphalt industry, Concrete plants, Petroluem refineries, Smelters, Metal industry, Iron and steel industry, Sewage treatment plants, Lead smelters, Brass and bronze plants

PB-231 601 PC A07/MF A01
Background Information for New Source Performance Standards: Asphalt Concrete Plants, Petroleum Refineries, Storage Vessels, Secondary Lead Smelters and Refineries, Brass and Bronze Ingot Production Plants, Iron and Steel Plants, and Sewage Treatment Plants. Volume 3. Promulgated Standards
EPA, Research Triangle Park, NC, OAQPS
Feb 74, 148p, APTD-1352C, EPA-450/2-74-003

Abstract: See PB-202 459

Descriptors: NSPS, Asphalt industry, Concrete plants, Petroleum refineries, Smelters, Metal industry, Sewage treatment plants, Iron and steel industry, Lead smelters, Brass and bronze plants

PB-237 169 PC A07/MF A01
Background Information on National Emission Standards for Hazardous Air pollutants - Proposed Amendments to Standards for Asbestos and Mercury
EPA, Research Triangle Park, NC, OAQPS
Oct 74, 150p, EPA-450/2-74-009A

Rationale for amendments promulgated April 6, 1973, and an evaluation of their economic and environmental impacts are presented. Report covers asbestos pollution related to manufacturing, demolition and renovation, fabrication and disposal of wastes, and mercury emissions from sludge incineration and drying facilities. Optional air cleaning methods for compliance with asbestos standards, chemical stabilization of waste disposal sites, and estimation of allowable mercury emissions from sewage sludge incineration facilities are discussed.

Descriptors: NESHAP, Asbestos, Mercury, Construction, Sewage sludge incinertors, Incinerators, Combustion, Demolition and renovation, Hazardous waste disposal, Manufacturing asbestos products, Fabrication

PB-237 411 PC A08/MF A01
Background Information for Standards of Performance: Electric Submerged Arc Furnaces for Production of Ferroalloys. Volume I: Proposed Standards
EPA, Research Triangle Park, NC, OAQPS
Oct 74, 163p, EPA-450/2-74-018A

Abstract: See PB-202 459

Descriptors: NSPS, Iron and steel industry, Electric arc furnaces

PB-237 421 PC A04/MF A01
Background Information for Standards of Performance: Coal Preparation Plants, Volume I: Proposed Standards
EPA, Research Triangle Park, NC, OAQPS
Oct 74, 59p, EPA-450/2-74-021A

Abstract: See PB-202 459

Descriptors: NSPS, Coal preparation plants

PB-237 606 PC A07/MF A01
Background Information for Standards of Performance: Phosphate Fertilizer Industry. Volume 1. Proposed Standards
EPA, Research Triangle Park, NC, OAQPS
Oct. 74, 140p, EPA-450/2-74-019A

Abstract: See PB-202 459

Descriptors: NSPS, Fertilizer industry

PB-237 607 PC A04/MF A01
Background Information for Standards of Performance: Phosphate Fertilizer Industry. Volume 2: Test Data Summary
EPA, Research Triangle Park, NC, OAQPS
Oct 74, 63p, EPA-450/2-74-019B

Abstract: See PB-202 459

Descriptors: NSPS, Fertilizer industry

PB-237 612 PC A06/MF A01
Background Information for Standards of Performance: Primary Aluminum Industry. Volume I: Proposed Standards
EPA, Research Triangle Park, NC, OAQPS
Oct 74, 123p, EPA-450/2-74-020A

Abstract: See PB-202 459

Descriptors: NSPS, Aluminum industry, Metal industry

PB-237 613 PC A06/MF A01
Background Information for Standards of Performance: Primary Aluminum Industry. Volume I: Test Data Summary
EPA, Research Triangle Park, NC, OAQPS
Oct 74, 123p, EPA-450/2-74-020B

Abstract: See PB-202 459

Descriptors: NSPS, Aluminum industry, Metal industry

PB-237 696 PC A03/MF A01
Background Information for Standards of Performance: Coal Preparation Plants. Volume 2. Summary and Test Data
EPA, Research Triangle Park, NC, OAQPS
Oct 74, 39p, EPA-450/2-74-021B

Abstract: See PB-202 459

Descriptors: NSPS, Coal preparation plants

PB-237 832 PC A99/MF A01
Background Information for New Source Performance Standards: Primary Copper, Zinc, and Lead Smelters. Volume 1: Proposed Standards.
EPA, Research Triangle Park, NC, OAQPS
Oct 74, 612p, EPA-450/2-74-002A

Abstract: See PB-202 459

Descriptors: NSPS, Copper smelters, Lead smelters, Zinc smelters, Smelters

PB-237 840 PC A08/MF A01
Background Information for Standards for Performance: Electric Arc Furnaces in the Steel Industry, Volume 1: Proposed Standards
EPA, Research Triangle Park, NC, OAQPS
Oct 74, 170p, EPA-450/2-74-017A

Abstract: See PB-202 459

Descriptors: NSPS, Iron and steel industry, Electric arc furnaces

PB-237 841 PC A03/MF A01
Background Information for Standards of Performance: Electric Arc Furnaces in the Steel Industry. Volume 2: Test Data Summary
EPA, Research Triangle Park, NC, OAQPS
Oct 74, 44p, EPA-450/2-74-017B

Abstract: See PB-202 459

Descriptors: NSPS, Electric arc furnaces, Iron and steel industry

PB-238 077 PC A04/MF A01
Background Information for Standards of Performance: Electric Submerged Arc Furnaces for Production of Ferroalloys. Volume 2: Test Data Summary
EPA, Research Triangle Park, NC, OAQPS
Oct 74, 60p, EPA-450/2-74-018B

Abstract: See PB-202 459

Descriptors: NSPS, Iron and steel industry, Electric arc furnaces

PB-243 423 PC A14/MF A01
Source Assessment: Prioritization of Air Pollution from Industrial Surface Coating Operations
EPA, Research Triangle Park, NC, IERL
Monsanto Research Corp.
T. W. Hughes, et al
Feb 75, 311p, EPA-650/2-75-019A

Industrial surface coating operations, excluding those associated with automobile and architectural painting, are used in the coating of sheet, strip, coil, paper and paperboard, in treating fabrics, and in finishing appliances, machinery and furniture. These coating operations produce hydrocarbon emissions, primarily solvents and resins, and particulate emissions. Background information and technical data were collected and analyzed in this study in order to establish a data base for prioritizing atmospheric emissions from industrial surface coating operations, excluding automobile and architectural painting. This special project was undertaken to provide information on solvent evaporation processes required by the EPA for use in establishing New Source Performance Standards for industrial surface coating operations.

Descriptors: Source assessment, Solvents, Resins, Coating operations

PB-249 703 PC A23/MF A01
Standard Support and Environmental Impact Statement: Emission Standard for Vinyl Chloride
EPA, Research Triangle Park, NC, OAQPS
Oct 75, 536p, EPA-450/2-75-009A

A national emission standard for vinyl chloride emitted from ethylene dichloride-vinyl chloride and polyvinyl chloride plants is being proposed under the authority of section 112 of the Clear Air Act. Vinyl chloride has been implicated as the causal agent of angiosarcoma and other serious disorders, both carcinogenic and noncarcinogenic, in people with occupational exposure and in animals with experimental exposure to vinyl chloride. Reasonable extrapolations from these findings cause concern that vinyl chloride may cuase or contribute to the same or similar disorders at present ambient air levels. The purpose of the proposed standard is to minimize vinyl chloride emissions from all known process and fugitive emission sources in ethylene dichloride-vinyl chloride and polyvinyl chloride plants to the level attainable with best available control technology. This would have the effect of furthering the protection of public health by minimizing the health risks to the people living in the vicinity of theses plants and to any additional people who are exposed as a result of new construction. This is estimated to have the effect of reducing emissions from a typical ethylene dichloride-vinyl chloride plant by approximately 94 percent and from a typical polyvinyl chloride plant by approximately 95 percent. Environmental Impact and Inflation Impact Statements quantifying the impacts of the proposed standard and alternative control levels are included in the document.

Descriptors: NESHAP, Vinyl chloride, Ethylene dichloride/vinyl chloride plants, Polyvinyl chloride plants, Chemical industry

PB-250 667 PC A04/MF A01
Background Information for Standards of Performance: Primary Aluminum Industry. Volume 3: Supplemental Information
EPA, Research Triangle Park, NC, OAQPS
Jan 76, 52p, EPA-450/2-74-020C

Abstract: See PB-202 459

Descriptors: NSPS, Aluminum industry, Metal industry

PB-251 618 PC A04/MF A01
Background Information for Standards of Performance: Coal Preparation Plants. Volume 3. Supplemental Information
EPA, Research Triangle Park, NC, OAQPS
Jan 76, 62p, EPA-450/2-74-021C

Abstract: See PB-202 459

Descriptors: NSPS, Coal preparation plants

PB-252 031 PC A06/MF A01
Background Information for Standards of Performance: Electric Submerged Arc Furnaces for Production of Ferroalloys. Volume 3: Supplemental Information
EPA, Research Triangle Park, NC, OAQPS
Apr 76, 112p, EPA-450/2-74-018C

Abstract: See PB-202 459

Descriptors: NSPS, Iron and steel industry, Electric arc furnaces

PB-252 356 PC A08/MF A01
Source Assessment: Flat Glass Manufacturing Plants
EPA, Research Triangle Park, NC, IERL
Monsanto Research Corp.
R. B. Reznik
Mar 76, 152p, EPA-600/2-76-032B

This report is one in a series of source assessments, each describing air emissions from a particular industry. Each source assessment contains a description of industrial processes and identifies major emission points and pollutants. Emission factors or rates are given for the major pollutants from the source under study. Control technology is discussed. Finally, source severity factors are calculated as a measure of the potential environmental effects of air emissions from the industry.

Descriptors: Source assessments, Alkali sulfates, Glass industry

PB-253 479 PC A05/MF A01
Source Assessment: Prioritization of Stationary Air Pollution Sources. Model Description
EPA, Research Triangle Park, N.C., IERL
Monsanto Research Corp.
E. C. Eimutis
Feb 76, 83p, EPA-600/2-76-032A

The report describes a prioritization model for the rank-ordering of stationary air pollution sources. The source types were rank-ordered or prioritized by computing a relative environmental impact factor for each source type. A priority listing was developed for each of four categories: combustion, organic materials, inorganic materials, and open sources. The report also describes both the actual application of the model and the types of calculations that were performed depending upon the degree of input aggregation. The report also gives detailed examples of use, as well as results of sensitivity analyses, showing how the prioritization model responds to input changes.

Descriptors: Source assessment

PB-253 992 PC A09/MF A01
Source Assessment: Fertilizer Mixing Plants
EPA, Research Triangle Park, NC, IERL
Monsanto Research Corp.
G. D. Rawlings, R. B. Reznik,
Mar 76, 196p, EPA-600/2-76-032C

Abstract: see PB 252 356

Descriptors: Source assessment, Ammonia, Phosphorus, Chlorine, Fluorine, Salts, Fertilizer industry, Chemical industry

PB-256 310 PC A07/MF A01
Source Assessment: Severity of Stationary Air Pollution Sources - A Simulation Approach
EPA, Research Triangle Park, NC, IERL
Monsanto Research Corp.
E. C. Eimutis, B. J. Holmes, L. B. Mote,
Jul 76, 133p, EPA-600/2-76/032E

The report gives results of a study simulating the establishment of the severity of stationary air pollution sources. The potential environmental impact of an emission source can be determined from the source severity (the ground level concentration contribution of pollutants relative to some potentially hazardous concentration of the same species). The frequency distribution of the severity of well-documented source types can be examined deterministically. A statistical approach is required to simulate the frequency distribution of the severity of source types that are complex or involve a large number of emission points in order to ultimately assess such sources. A Monte Carlo simulation technique is described in this report, together with efficient algorithms for fitting the inverse Weibull, gamma, normal, and log-normal cumulative density functions. Significant correlation is demonstrated between deterministic and simulated severity results using coal-fired steam/electric utilities as an example.

Descriptors: Source assessment

PB-257 975 PC A09/MF A01
Standards Support and Environmental Impact Statement Volume 1: Proposed Standards of Performance for Petroleum Refinery Sulfur Recovery Plants
EPA, Research Triangle Park, NC, OAQPS
Sep 76, 200p, EPA-450/2-76-016A

Abstract: See PB-202 459

Descriptors: NSPS, Petroleum refineries, Sulfur recovery plants

PB-258 007 PC A17/MF A01
Standard Support and Environmental Impact Statement Volume 1: Proposed Standards of Performance for Kraft Pulp Mills
EPA, Research Triangle Park, NC, OAQPS
Sep 76, 386p, EPA-450/2-76-014A

Abstract: See PB-202 459

Descriptors: NSPS, Pulp mills

PB-258 827 PC A07/MF A01
Standard Support and Environmental Impact Statement. Volume 2. Promulgated Emission Standard for Vinyl Chloride
EPA, Research Triangle Park, NC, OAQPS
Sep 76, 135p, EPA-450/2-75-009B

A national emission standard for vinyl chloride emitted from ethylene dichloride-vinyl chloride and polyvinyl chloride plants is being promulgated under the authority of section 112 of the Clear Air Act. Vinyl chloride has been implicated as the causal agent of angiosarcoma and other serious disorders, both carcinogenic and noncarcinogenic, in people with occupational exposure and in animals with experimental exposure to vinyl chloride. Reasonable extrapolations from these findings cause concern that vinyl chloride may cause or contribute to the same or similar disorders at present ambient air levels. The purpose of the standard is minimize vinyl chloride emissions from all known process and fugitive emission sources in ethylene dichloride-vinyl chloride and polyvinyl chloride plants to the level attainable with best available control technology. This would have the effect of furthering the protection of public health by minimizing the health risks to the people living in the vicinity of these plants and to any additional people who are exposed as a result of new construction. This is estimated to have the effect of reducing emissions from a typical ethylene dichloride-vinyl chloride plant by approximately 94 percent and from a typical polyvinyl chloride plant by approximately 95 percent. This document contains a summary of the public comments on the proposed standard and EPA's responses to the comments. It also contains updated information concerning the environmental and inflationary impacts of the standard.

Descriptors: NESHAP, Vinyl chloride, Ethylene dichloride/vinyl chloride plants, Polyvinyl chloride plants, Chemical industry

PB-262 002 PC A07/MF A01
Source Assessment: Glass Container Manufacturing Plants
EPA, Research Triangle Park, NC, IERL
Battelle Columbus Labs
J. R. Schorr
Oct 76, 146p, EPA-600/2-76-269

Abstract: See PB-252 356

Descriptors: Source assessment, Mineral sulfates, Selenium, Glass industry

PB-265 062 PC A13/MF A01
Final Guideline Document: Control of Fluoride Emissions from Existing Phosphate Fertilizer Plants
EPA, Research Triangle Park, NC, OAQPS
Mar 77, 277p, EPA-450/2-77-005

The document serves as a text to state agencies in the development of their gaseous fluoride emission regulations from existing phosphate fertilizer plants. Recommended emission units are suggested for five production facilities: wet-processes phosphoric acid, diammonium phosphate, superphosphoric acid, triple superphosphate, granular triple superphosphate production and storage. Information contained within includes data on the phosphate fertilizer industry and control technology, a discussion of the guideline emission limitations and the supporting data, and analyses of the environmental and economic impacts of the guideline limits.

Descriptors: NSPS, Fluorides, Fertilizer industry

PB-265 479 PC A04/MF A01
Background Information for an Opacity Standard of Performance for Basic Oxygen Process Furnaces in Iron and Steel Plants
EPA, Research Triangle Park, NC, OAQPS
Mar 77, 66p, EPA-450/2-77-004

Abstract: See PB-202 459

Descriptors: NSPS, Iron and steel industry, Basic oxygen process furnaces

PB-266 224 PC A08/MF A01
Industrial Process Profiles for Environmental Use: Chapter 5. Basic Petrochemicals Industry
EPA, Research Triangle Park, NC, IERL
Radian Corp.
T. B. Parsons, C. M. Thompson, G. E. Wilkins
Jan 77, 155p, EPA-600/2-77-023E

The catalog of Industrial Process Profiles for Environmental Use was developed as an aid in defining the environmental impacts of industrial activity in the United States. Entries for each industry are in consistent format and form separate chapters of the study. Each chapter gives a general overview of the industry followed by process description and flow diagrams. Within each process description, available data on input materials, operating parameters, utility requirements, and waste streams are summarized. Appendices include related data such as company listing, raw material and production data, and atomospheric emissions.

Descriptors: Source assessment, Petrochemical industry, Chemical industry

PB-266 225 PC A11/MF A01
Industrial Process Profiles for Environmental Use: Chapter 8. Pesticides Industry
EPA, Research Triangle Park, NC, IERL
Radian Corp.
T. B. Parsons, F. I. Hones
Jan 77, 240p, EPA-600/2-77-023H

Abstract: See PB-266 224

Descriptors: Source assessment, Pesticide manufacturing, Chemical industry

PB-266 226 PC A10/MF A01
Industrial Process Profiles for Environmental Use: Chapter 24. The Iron and Steel Industry
EPA, Research Triangle Park, NC, IERL
Radian Corp.
T. Parsons, V. S. Katari, R. W. Gerstle
Feb 77, 209p, EPA-600/2-77-023X

Abstract: See PB-266 224

Descriptors: Source assessment, Iron and steel industry

PB-266 274 PC A02/MF A01
Industrial Process Profiles for Environmental Use: Chapter 1. Introduction
EPA, Research Triangle Park, NC, IERL
Radian Corp.
T. Parsons, I. A. Jefcoat, P. W. Spaite
Jan 77, 21p, EPA-600/2-77-023A

Abstract: See PB-266 224

Descriptors: Source assessment

PB-266 797 PC A08/MF A01
Source Assessment: Phthalic Anhydride (Air Emissions)
EPA, Research Triangle Park, NC, IERL
Monsanto Research Corp.
R. W. Serth, T. W. Hughes
Dec 76, 160p, EPA-600/2-76-032D

Abstract: See PB-252 356

Descriptors: Source assessment, Exposure assessment, Phthalic anhydride manufacturing, Chemical industry

PB-266 942 PC A13/MF A01
Standards Support and Environmental Impact Statement Volume 1: Proposed Standards of Performance for Lime Manufacturing Plants
EPA, Research Triangle Park, NC, OAQPS
Apr 77, 282p, EPA-450/2-77-077A

Abstract: See PB-202 459

Descriptors: NSPS, Lime industry

PB-267 610 PC A09/MF A01
Standards Support and Environmental Impact Statement Volume I: Proposed Standards of Performance for Lignite-Fired Steam Generators
EPA, Research Triangle Park, NC, OAQPS
Dec 76, 192p, EPA-450/2-76-030A

Abstract: See PB-202 459

Descriptors: NSPS, Boilers, Electric power plants, Combustion

PB-270 240 PC A05/MF A01
Source Assessment: Agricultural Opening Burning, State of the Art
EPA, Research Triangle Park, NC, IERL
Monsanto Research Corp.
C. T. Chi, D. L. Zanders
Jul 77, 77p, EPA-600/2-77-107A

Abstract: See PB-252 356

Descriptors: Source assessment, Polycyclic organic matter, Combustion, Agriculture, Open burning

PB-270 282 PC A06/MF A01
Source Assessment: Beef Cattle Feedlots
EPA, Research Triangle Park, NC, IERL
Monsanto Research Corp.
J. A. Peters, T. R. Blackwood
Jun 77, 114p, EPA-600/2-77-107

Abstract: See PB-252 356

Descriptors: Source assessment, Ammonia, Sulfides, Potassium permanganate, Gypsum, Agriculture

PB-270 550 PC A06/MF A01
Source Assessment: Noncriteria Pollutant Emissions
EPA, Research Triangle Park, NC, IERL
Monsanto Research Corp.
E. C. Eimutis, R. P. Quill
Jul 77, 116p, EPA-600/2-77-107E

The report lists stationary sources that emit each of 320 noncriteria pollutants. It also indicates quantities of such emissions. The list was prepared, using a computerized data base established for emissions of air pollutants from approximately 600 stationary source types in the combustion, organic materials, inorganic materials, and open source categories. (A source type is defined as a group of emission sources which have the same process and emission characteristics.)

Descriptors: Source assessment, Organic compounds, Inorganic compounds

PB-271 486 PC A06/MF A01
Source Assessment: Mechanical Harvesting of Cotton - State of the Art
EPA, Research Triangle Park, NC, IERL
Monsanto Research Corp.
J. W. Synder, T. R. Blackwood
Jul 77, 121p, EPA-600/2-77-107D

Abstract: See PB-252 356

Descriptors: Source assessment, Agriculture

PB-271 697 PC A05/MF A01
Source Assessment: Harvesting of Grain - State of the Art
EPA, Research Triangle Park, NC, IERL
Monsanto Research Corp.
R. A. Wachter, T. R. Blackwood
Jul 77, 99p, EPA-600/2-77-107F

Abstract: See PB-252 356

Descriptors: Source assessment, Silicon dioxide, Pesticides, Agriculture

PB-271 969 PC A06/MF A01
Source Assessment: Acrylonitrile Manufacture (Air Emissions)
EPA, Research Triangle Park, NC, IERL
Monsanto Research Corp.
T. W. Hughes, D. A. Horn
Sep 77, 123p, EPA-600/2-77-107J

Abstract: See PB-252 356

Descriptors: Source assessment, Acrylonitrile plants, Chemical industry

PB-271 984 PC A05/MF A01
Source Assessment: Ammonium Nitrate Production
EPA, Research Triangle Park, NC, IERL
Monsanto Research Corp.
W. J. Search, R. B. Reznik
Sep 77, 80p, EPA-600/2-77-107I

Abstract: See PB-252 356

Descriptors: Source assessment, Ammonia, Ammonium nitrate manufacturing, Chemical industry

PB-271 986 PC A07/MF A01
Source Assessment: Overview and Prioritization of Emissions from Textile Manufacturing
EPA, Research Triangle Park, NC, IERL
Monsanto Research Corp.
R. A. Wachter, S. R. Archer, T. R. Blackwood
Sep 77, 142p, EPA-600/2-77-107H

Abstract: See PB-252 356

Descriptors: Source assessment, Textile industry

PB-272 422 PC A25/MF A01
Standards Support and Environmental Impact Statement Volume 1: Proposed Standards of Performance for Stationary Gas Turbines
EPA, Research Triangle Park, NC, OAQPS
Sep 77, 593p, EPA-450/2-77-017A

Abstract: See PB-202 459

Descriptors: NSPS, Gas turbines

PB-272 621 PC A07/MF A01
Source Assessment: Defoliation of Cotton, State of the Art
EPA, Research Triangle Park, NC, IERL
Monsanto Research Corp.
J. A. Peters, T. R. Blackwood
Jul 77, 134p, EPA-600/2-77-107G

Abstract: See PB-252 356

Descriptors: Source assessment, Arsenic acid, Paraquat, DEF-6, Folex, Sodium chlorate, Organic compounds, Agriculture

PB-273 068 PC A11/MF A01
Source Assessment: Carbon Black Manufacture
EPA, Research Triangle Park, N.C., IERL
Monsanto Research Corp.
R. W. Serth, T. W. Hughes
Oct 77, 248p, EPA-600/2-77-107K

Abstract: See PB-252 356

Descriptors: Source assessment, Carbon black, Hydrogen sulfide, Carbon black manufacturing, Chemical industry

PB-273 649 PC A07/MF A01
Industrial Process Profiles for Environmental Use: Chapter 3. Petroleum Refining Industry
EPA, Research Triangle Park, NC, IERL
Radian Corp.
J. C. Dickerman, et al.
Jan 77, 148p, EPA-600/2-77-023C

Abstract: PB-266 224

Descriptors: Source assessment, Petroleum refineries

PB-273 788 PC A07/MF A01
Source Assessment: Pressed and Blown Glass Manufacturing Plants
EPA, Research Triangle Park, NC, IERL
Battelle Columbus Labs
J. R. Schorr, et al.
Jan 77, 143p, EPA-600/2-77-005

Abstract: See PB-252 356

Descriptors: Source assessment, Fluorides, Selenium, Mineral sulfates, Glass industry

PB-274 085 PC A09/MF A01
Final Guideline Document: Control of Sulfuric Acid Mist Emissions from Existing Sulfuric Acid Production Units
EPA, Research Triangle Park, NC, OAQPS
Sep 77 189p, EPA-450/2-77-019

The U. S. Environmental Protection Agency is required under 40 CFR Part 60 to publish a guideline document for development of State emission standards after promulgating any standard of performance limiting emissions of such a designated pollutant--sulfuric acid mist--from new and modified sulfuric acid production units were promulgated on December 23, 1971, including the following information: (1) Emission guidelines and times for compliance; (2) A brief description of the sulfuric acid industry, and the nature and source of acid mist emissions; (3) Information regarding the effects of acid mist on health and welfare; and (4) Assessments of the environmental, economic, and energy impacts of the emission guideline.

Descriptors: NSPS, Sulfuric acid, Sulfuric acid plants, Chemical industry

PB-274 367 PC A05/MF A01
Source Assessment: Urea Manufacture
EPA, Research Triangle Park, NC, IERL
Monsanto Research Corp.
W. J. Search, R. B. Reznik
Nov 77, 94p, EPA-600/2-77/107L

Abstract: See PB-252 356

Descriptors: Source assessment, Urea manufacturing, Chemical industry

PB-275 525 PC A22/MF A01
Compilation of Air Pollutant Emission Factors. Third Edition. Parts A and B (Including Supplements 1 through 7)
EPA, Research Triangle Park, NC, OAQPS
Aug 77, 511p, AP-42

Emission data obtained from source tests, material balance studies, engineering estimates, etc., have been compiled for use by individuals and groups responsible for conducting air pollution emission inventories. Emission factors given in this document, the result of the expansion and continuation of earlier work, cover most of the common emission categories: fuel combustion by stationary and mobile sources, combustion of solid wastes, evaporation of fuels, solvents, and other volatile substances, various industrial processes, and miscellaneous sources. When no specific source-test data are available, these factors can be used to estimate the quantities of primary pollutants (particulates, CO, SO2, NOx, and hydrocarbons) being released from a source or source group. Individual AP-42 Supplements are also available from NTIS, as follows:

AP-42 Supplement Number	NTIS Order Number	Price Code
Supplement 8	PB-288 905	A06
Supplement 9	PB-295 614	A06
Supplement 10	PB80-199045	A07
Supplement 11	PB81-178014	A05
Supplement 12	PB82-101213	A09
Supplement 13	PB83-126557	A06
Supplement 14	PB83-250720	A08
Supplement 15	PB84-199744	A05

Descriptors: Source assessment, Emission factors document

PB-276 718 PC A05/MF A01
Source Assessment: Synthetic Ammonia Production
EPA, Research Triangle Park, NC, IERL
Monsanto Research Corp.
G. D. Rawlings, R. B. Reznik
Nov 77, 85p, EPA-600/2-77-107M

Abstract: See PB-252 356

Descriptors: Source assessment, Ammonia, Ammonia production, Chemical industry

PB-276 731 PC A09/MF A01
Source Assessment: Asphalt Hot Mix
EPA, Cincinnati, OH, IERL
Monsanto Research Corp.
Z. S. Khan, T. W. Hughes
Dec 77, 196p, EPA-600/2-77-107N

Abstract: See PB-252 356

Descriptors: Source assessment, Polycyclic organic matter, Aldehydes, Asphalt industry

PB-276 745 PC A05/MF A01
Methods for Determining the Polychlorinated Biphenyl Emissions from Incineration and Capacitor and Transformer Filling Plants
EPA, Research Triangle Park, NC, EMSL
Midwest Research Inst.
L. Haile, E. Baladi
Nov 77, 94p, EPA-600/4-77-048

Described are methods to measure the polychlorinated biphenyl (PCB) emissions from the stacks of municipal waste, industrial waste, and sewage sludge incinerators and from capacitor and transformer filling plants. The PCB emissions from the incineration plants are collected by impingement in water and adsorption on Florisil. The samples are extracted with hexane, concentrated through evaporation of the solvent, perchlorinated, and the polychlorinated biphenyl content measured as the decachlorinated isomer using a gas chromatograph equipped with a flame ionization detector. The PCB emissions from the capacitor and transformer filling plants are collected directly on Florisil, extracted with hexane and quantified against the appropriate Aroclor using a gas chromatograph. The methods were developed from laboratory studies and field tested at nine incineration plants and two transformer filling plants.

Descriptors: Source sampling/ambient monitoring methodology, Incinerators, Capacitor and transformer plants, Polychlorinated biphenyls (PCB), Combustion

PB-278 135 PC A10/MF A01
Draft Guideline Document: Control of TRS Emissions from Existing Kraft Pulp Mills
EPA, Research Triangle Park, NC, OAQPS
Jan 78, 210p, EPA-450/2-78-003A

Guidelines to aid the states in their preparation of plans for the control of emissions of total reduced sulfur (TRS) from existing kraft pulp mills are being proposed under the authority of section 111(d) of the Clean Air Act. TRS emissions from kraft pulp mills are extremely odorous, and there are numerous instances of poorly controlled mills creating public odor problems. Adoptions of the proposed emission guidelines by the states would result in an overall reduction of about 80 percent in nationwide TRS emissions from kraft pulp mills.

Descriptors: NSPS, Sulfur compounds, Pulp mills

PB-278 160 PC A03/MF A01
Standards Support and Environmental Impact Statement Volume II: Promulgated Standards of Performance for Kraft Pulp Mills
EPA, Research Triangle Park, NC, OAQPS
Dec 77, 50p, EPA-450/2-76-014B

Abstract: See PB-202 459

Descriptors: NSPS, Pulp mills

PB-278 163 PC A03/MF A01
Standards Support and Environmental Impact Statement Volume II: Promulgated Standards of Performance for Petroleum Refinery Sulfur Recovery Plants
EPA, Research Triangle Park, NC, OAQPS
Jan 78, 39p, EPA-450/2-76-016B

Abstract: See PB-202 459

Descriptors: NSPS, Petroleum refineries, Sulfur recovery plants

PB-278 777 PC A05/MF A01
Source Assessment: Polychloroprene. State of the Art
EPA, Cincinnati, OH, IERL
Monsanto Research Corp.
D. A. Horn, D. R. Tierney, T. W. Hughes
Dec 77, 97p, EPA-600/2-77-1070

Abstract: See PB-252 356

Descriptors: Source assessment, Hydrogen chloride, Chloroprene, Toluene, Talc, Polychloroprene manufacturing, Chemical industry

PB-278 816 PC A07/MF A01
Destroying Chemical Wastes in Commercial Scale Incinerators
TRW Defense and Space Systems Group
D. Ackerman, et al.
1978, 130p, EPA-530/SW-155C

The report summarizes the results of a Phase II test program demonstrating the effectiveness of thermal destruction of industrial wastes in commercial scale facilities. Phase I was a study effort to select and match suitable wastes and destruction facilities, and to develop a set of detailed facility test plans. Phase II evaluated the environmental, technical, and economic feasibility of thermally destroying fourteen selected industrial wastes in seven different existing commercial scale processing facilities. Results indicated that each of the wastes tested can be thermally destroyed at high efficiencies. Separate detailed reports published for each facility test series conducted and the two volume Phase I report are listed in the references.

Descriptors: Source assessment, Incinerators, Combustion, Hazardous waste disposal, Ethylene, Styrene, Phenols, Polyvinyl chloride, Hexachlorocyclopentadiene, Methyl methacrylate, Benzene, Nitrobenzene, Organic compounds, Polychlorinated biphenyls (PCB)

PB-279 008 PC A03/MF A01
Standards Support and Environmental Impact Statement Volume 2. Promulgated Standards of Performance for Lignite-Fired Steam Generators
EPA, Research Triangle Park, NC, OAQPS
Nov 77, 34p, EPA-450/2-76-030B

Abstract: See PB-202 459

Descriptors: NSPS, Boilers, Electric power plants, Combustion

PB-279 171 PC A08/MF A01
Source Assessment: Pesticide Manufacturing Air Emissions - Overview and Prioritization
EPA, Research Triangle Park, NC, IERL
Monsanto Research Corp.
S. R. Archer, W. R. McCurley, G. D. Rawlings
Mar 78, 153p, EPA-600/2-78-004D

This report is an overview of the pesticide manufacturing industry and prioritizes 80 major pesticides based on their potential environmental burden from an air pollution standpoint. Production of synthetic organic pesticides was about 640,000 metric tons in 1974. Thirty-seven major synthetic organic pesticides, those with annual production of 4540 or more tons, accounted for 74% of the market. Elemental chlorine is common to most pesticides, but other raw materials include hydrogen cyanide, carbon disulfide, phosgene, phosphorus pentasulfide, hexachloro-cyclopentadiene, various amines, and concentrated acids and caustics. Air pollution aspects of the pesticide manufacturing industry are essentially without quantitative data. For some plants, the pollution caused by loss of active ingredients is less significant than that caused by unreacted by-products. Evaporation from holding ponds and evaporation lagoons may also be an emission source, although few quantitative data are available. Emissions emanate from various pieces of equipment and enter the atmosphere as both the active ingredient and as raw materials, intermediates, and by-products. Air emission control devices include baghouses, cyclone separators, electrostatic precipitators, incinerators, and gas scrubbers. Synthetic organic pesticide production.in 1985 will be about 806,000 metric tons.

Descriptors: Source assessment, Organic compounds, Phosphorus sulfides, Carbon disulfide, Acids, Amines, Phosgene, Hydrogen cyanide, Hexachlorocyclopentadiene, Pesticide manufacturing, Chemical industry

PB-280 024 PC A05/MF A01
Source Assessment: Cotton Gins
EPA, Cincinnati, OH, IERL
Monsanto Research Corp.
G. D. Rawlings, R. B. Reznik
Jan 78, 82p, EPA-600/2-78-004A

Abstract: See PB-252 356

Descriptors: Source assessment, Cotton gins, Agriculture

PB-280 118 PC A10/MF A01
Burning Waste Chlorinated Hydrocarbons in a Cement Kiln
EPA, Washington, D.C., OSW
Environmental Protection Service, Montreal
L.D. McDonald, et al.
Jan 78, 221p, EPA-530/SW-147C

An experimental program was carried out in 1975/76 at the St. Lawrence Cement Co., Mississauga, Ontario in which waste chlorinated hydrocarbons, containing up to about 46 weight percent chlorine, were burned in a rotary cement kiln. Materials burned included mixtures of ethylene dichloride, chlorotoluene and up to approximately 50 percent polychlorinated biphenyls (PCB). These materials were destroyed in the cement kiln with at least 99.98 percent efficiency in all cases. Emissions of high molecular weight chlorinated hydrocarbons, dichloromethane, chloroform and carbon tetrachloride, were found in the emissions in the part per billion or lower range. The quantity of precipitator dust requiring disposal, as well as emissions of particulate matter, increased during the test. A reduction in fossil fuels used while burning chlorinated hydrocarbons was noted.

Descriptors: Source assessment, Cement industry, Combustion, Hazardous waste disposal, Ethylene dichloride, Chlorotoluene, Polychlorinated biphenyls (PCB)

PB-280 726 PC A04/MF A01
Source Assessment: Rail Tank Car, Tank Truck, and Drum Cleaning, State of the Art
EPA, Cincinnati, OH, IERL
Monsanto Research Corp.
D. E. Earley, K. M. Tackett, T. R. Blackwood
Apr 78, 69p, EPA-600/2-78-004G

Abstract: See PB-252 356

Descriptors: Source assessment, Cargo transport, Cleaning, Organic compounds

PB-280 756 PC A08/MF A01
Source Assessment: Major Barium Chemicals
EPA, Cincinnati, OH, IERL
Monsanto Research Corp.
R. B. Reznik, H. D. Troy, Jr.
Mar 78, 154p, EPA-600/2-78-004B

Abstract: See PB-252 356

Descriptors: Source assessment, Barium, Barium chemical manufacturing, Chemical industry

PB-280 926 PC A06/MF A01
Source Assessment: Plastics Processing, State of the Art
EPA, Cincinnati, OH, IERL
Monsanto Research Corp.
T. W. Hughes, R. F. Boland, G. M. Rinaldi
Mar 78, 106p, EPA-600/2-78-004C

Abstract: See PB-252 356

Descriptors: Source assessment, Plastics industry

PB-281 422 PC A04/MF A01
Source Assessment: Crushed Limestone, State of the Art
EPA, Cincinnati, OH, IERL
Monsanto Research Corp.
P. K. Chalekode, T. R. Blackwood, S. R. Archer
Apr 78, 65p, EPA-600/2-78-004E

Abstract: PB-252 356

Descriptors: Source assessment, Silicon dioxide, Lime industry

PB-281 423 PC A07/MF A01
Source Assessment: Rubber Processing, State of the Art
EPA, Cincinnati, OH, IERL
Monsanto Research Corp.
C. T. Chi, et al.
Mar 78, 135p, EPA-600/2-78-004J

Abstract: See PB-252 356

Descriptors: Source assessment, Styrene, Butadiene, Resins, Solvents, Zinc oxide, Carbon black, Soapstone, Rubber industry.

PB-281 477 PC A03/MF A01
Industrial Process Profiles for Environmental Use: Chapter 4. Carbon Black Industry
EPA, Cincinnati, OH, IERL
Radian Corp.
R. W. Gerstle, et al.
Feb 77, 43p, EPA-600/2-77-023D

Abstract: See PB-266 224

Descriptors: Source assessment, Carbon black manufacturing, Chemical industry

PB-281 478 PC A99/MF A01
Industrial Process Profiles for Environmental Use: Chapter 6. The Industrial Organic Chemicals Industry
EPA, Cincinnati, OH, IERL
Research Triangle Institute
R. Liepins, et al.
Feb 77, 1014p, EPA-600/2-77-023F

Abstract: See PB-266 224

Descriptors: Source assessment, Chemical industry, Petrochemical industry

PB-281 479 PC A16/MF A01
Industrial Process Profiles for Environmental Use: Chapter 7. Organic Dyes and Pigments Industry
EPA, Cincinnati, OH, IERL
Radian Corp.
T. R. Steadman, et al.
Feb 77, 362p, EPA-600/2-77-023G

Abstract: See PB-266 224

Descriptors: Source assessment, Dyes and pigments industry, Chemical industry

PB-281 480 PC A05/MF A01
Industrial Process Profiles for Environmental Use: Chapter 9. The Synthetic Rubber Industry
EPA, Cincinnati, OH, IERL
Radian Corp.
J. Parr, T. B. Parsons, N. P. Phillips
Feb 77, 97p, EPA-600/2-77-023I

Abstract: See PB-266 224

Descriptors: Source assessment, Rubber industry

PB-281 481 PC A04/MF A01
Industrial Process Profiles for Environmental Use: Chapter 11. The Synthetic Fiber Industry
Radian Corp.
J. L. Parr
Feb 77, 58p, EPA-600/2-77-023K
Abstract: See PB-266 224

Descriptors: Source assessment, Synthetic fiber industry, Textile industry

PB-281 482 PC A14/MF A01
Industrial Process Profiles for Environmental Use: Chapter 15. Brine and Evaporite Chemicals Industry
EPA, Cincinnati, OH, IERL
Radian Corp.
P. E. Muehlberg, et al.
Feb 77, 324p, EPA-600/2-77-023O

Abstract: See PB-266 224

Descriptors: Source assessment, Brine and evaporite chemicals industry, Chemical industry

PB-281 483 PC A06/MF A01
Industrial Process Profiles for Environmental Use: Chapter 16. The Fluorocarbon-Hydrogen Fluoride Industry
EPA, Cincinnati, OH, IERL
Radian Corp.
H. E. Doorenbus, T. Parsons
Feb 77, 119p, EPA-600/2-77-023P

Abstract: See PB-266 224

Descriptors: Source assessment, Fluorocarbon-hydrogen fluoride industry, Chemical industry

PB-281 484 PC A04/MF A01
Industrial Process Profiles for Environmental Use: Chapter 17. The Gypsum and Wallboard Industry
EPA, Cincinnati, OH, IERL
Radian Corp.
P. E. Muehlberg, B. P. Shepherd, T. Parsons
Feb 77, 52p, EPA-600/2-77-023Q

Abstract: See PB-266 224

Descriptors: Source assessment, Gypsum and wallboard industry, Chemical industry

PB-281 485 PC A04/MF A01
Industrial Process Profiles for Environmental Use: Chapter 18. The Lime Industry
EPA, Cincinnati, OH, IERL
Radian Corp.
A. C. Doumas, et al.
Feb 77, 57p, EPA-600/2-77-023R.

Abstract: See PB-266 224

Descriptors: Source assessment, Lime industry, Chemical industry

PB-281 486 PC A04/MF A01
Industrial Process Profiles for Environmental Use: Chapter 19. The Clay Industry
EPA, Cincinnati, OH, IERL
Radian Corp.
J. T. Reding, et al.
Feb 77, 69p, EPA-600/2-77-023S

Abstract: See PB-266 224

Descriptors: Source assessment, Brick manufacturing, Clay industry, Chemical industry

PB-281 487 PC A03/MF A01
Industrial Process Profiles for Environmental Use: Chapter 20. The Mica Industry
EPA, Cincinnati, OH, IERL
Radian Corp.
J. T. Reding, et al.
Feb 77, 40p, EPA-600/2-77-023T

Abstract: See PB-266 224

Descriptors: Source assessment, Mica industry, Mineral industry

PB-281 488 PC A04/MF 101
Industrial Process Profiles for Environmental Use: Chapter 21. The Cement Industry
EPA, Cincinnati, OH, IERL
Radian Corp.
P. E. Muehlberg, et al.
Feb 77, 52p, EPA-600/2-77-023U

Abstract: See PB-266 224

Descriptors: Source assessment, Cement industry

PB-281 489 PC A10/MF A01
Industrial Process Profiles for Environmental Use: Chapter 22. The Phosphate Rock and Basic Fertilizer Materials Industry
EPA, Cincinnati, OH, IERL
Radian Corp.
P. E. Muehlberg, et al.
Feb 77, 212p, EPA-600/2-77-023V

Abstract: See PB-266 224

Descriptors: Source assessment, Phosphate industry, Fertilizer industry, Chemical industry

PB-281 490 PC A04/MF A01
Industrial Process Profiles for Environmental Use: Chapter 23. Sulfur, Sulfur Oxides and Sulfuric Acid
EPA, Cincinnati, OH, IERL
Radian Corp.
R. W. Gerstle, et al.
Feb 77, 75p, EPA-600/2-77-023W

Abstract: See PB-266 224

Descriptors: Source assessment, Sulfur industry, Chemical industry

PB-281 491 PC A03/MF A01
Industrial Process Profiles for Environmental Use: Chapter 25. Primary Aluminum Industry
EPA, Cincinnati, OH, IERL
Radian Corp.
T. Parsons
Feb 77, 46p, EPA-600/2-77-023Y

Abstract: See PB-266 224

Descriptors: Source assessment, Aluminum industry, Metal industry

PB-281 492 PC A04/MF A01
Industrial Process Profiles for Environmental Use: Chapter 26. Titanium Industry
EPA, Cincinnati, OH, IERL
Radian Corp.
V. S. Katari, T. W. Devitt, T. B. Parsons
Feb 77, 67p, EPA-600/2-77-023Z

Abstract: See PB-266 224

Descriptors: Source assessment, Titanium industry, Metal industry

PB-282 934 PC A04/MF A01
Source Assessment: Reclaiming of Waste Solvents, State of the Art
EPA, Cincinnati, OH, IERL
Monsanto Research Corp.
D. R. Tierney, T. W. Hughes
Apr 78, 69p, EPA-600/2-78-004F

Abstract: See PB-252 356

Descriptors: Source assessment, Solvents, Solvent reclamation

PB-283 051 PC A18/MF A01
Development of Information on Pesticides Manufacturing for Source Assessment
EPA, Research Triangle Park, NC, IERL
Midwest Research Institute
G. L. Kelso, et al.
May 78, 416p, EPA-600/2-78-100

The report addresses the selection of relevant factors to gain perspective of the pollution potential from pesticides manufacturing and formulating operations and leads to the evolvement and defense of decision criteria for assessing the need for development of emissions control technology. Pesticides manufacturing and formulating operations are treated as materials input/output systems, with chemical wastes identified for all media. From about 300 active pesticide ingredients, six candidates (representing five different chemical classifications) were chosen for detailed source assessment. The pesticide industry is characterized and quantified where possible, using available information. Data give a macroeconomic view of the pesticides manufacturing and formulating operations. Government regulatory pressure and posture is identified and assessed. Appendices contain much information on the pesticides industry from several viewpoints.

Descriptors: Source assessment, Organic compounds, Pesticide manufacturing, Chemical industry, Uracils, Ureas, Dienes, Anilides, Triazines

PB-283 395 PC A06/MF A01
Source Assessment: Polyvinyl Chloride
EPA, Cincinati, OH, IERL
Monsanto Research Corp.
Z. S. Khan, T. W. Hughes
May 78, 107p, EPA-600/2-78-004I

Abstract: See PB-252 356

Descriptors: Source assessment, Vinyl chloride, Polyvinyl chloride, Polyvinyl chloride plants, Chemical industry

PB-283 642 PC A06/MF A01
Environmental Assessment: At-Sea and Land-Based Incineration of Organochlorine Wastes
EPA, Research Triangle Park, NC, IERL
TRW, Inc.
S.F. Paige, et al.
Apr 78, 116p, EPA-600/2-78-087

The report provides a generalized description of at-sea and land-based incineration of organochlorine wastes and an assessment of their corresponding impacts. The data base for at-sea incineration was obtained during a series of burns, between April 1974 and March 1977. Data describing land-based incineration were obtained from a review of the literature, and a brief survey of companies involved in commercial use and manufacture of incinerators. The report includes: (1) typical organochlorine waste compositions, (2) descriptions of emissions produced during at-sea and land-based incineration, (3) a simulation of corresponding air quality changes, (4) a description of predicted paths of transport of emission constituents, (5) estimates of water quality changes associated with both types of incineration, (6) an assessment of the potential for malfunction which could produce adverse environmental effects, (7) a general discussion of the kinds of environmental impacts associated with the incineration processes, and (8) identification of areas where there are needs for upgrading existing systems and data gaps which limit the comprehensiveness of the analysis.

Descriptors: Source assessment, Incinerators, Combustion, Hazardous waste disposal, Organic compounds

PB-283 661 PC A02/MF A01
Standards Support Document: Promulgated Amendments to the National Emission Standard for Asbestos
EPA, Research Triangle Park, NC, OAQPS
Jun 78, 24p, EPA-450/2-77-030

The national emission standard for asbestos is being amended. Scientific information indicates that asbestos exposure can cause cancer and other adverse health effects. The amendments will reduce asbestos emissions by requiring that proper work practices be followed during the renovation and demolition of buildings where friable asbestos materials are present and by prohibiting the spray application of asbestos materials which would be friable after drying. A brief description of the economic and environmental impacts associated with these amendments is included in this document.

Descriptors: NESHAP, Asbestos, Construction, Buildings and structures, Demolition and renovation

PB-283 699 PC A05/MF A01
Source Assessment: Coal-Fired Residential Combustion Equipment Field Tests, June 1977
EPA, Research Triangle Park, NC, IERL
Monsanto Research Corp.
D. G. DeAngelis, R. B. Reznik
June 78, 97p, EPA-600/2-78-0040

Abstract: See PB-252 356

Descriptors: Source assessment, Polycyclic organic matter, Organic compounds, Residential buildings, Combustion

PB-284 029 PC A05/MF A01
Source Assessment: Crushed Stone
EPA, Cincinnati, OH, IERL
Monsanto Research Corp.
T. R. Blackwood, P. K. Chalekode, R. A. Wachter
May 78, 94p, EPA-600/2-78-004L

Abstract: See PB-252 356

Descriptors: Source assessment, Silicon dioxide, Mining

PB-284 203 PC A10/MF A01
Assessment of Human Exposures to Atmospheric Benzene
EPA, Research Triangle Park, NC, OAQPS
SRI International
S. J. Mara, S. S. Lee
Jun 78, 213p, EPA-450/3-78-031

The report is one in a series that SRI Internation is providing on a quick response basis for the U. S. Environmental Protection Agency (EPA). Populations-at-risk to selected pollutants are being quantified for input to other more inclusive studies. The primary objective of this study was to estimate the environmental exposure of the U. S. populationto atmospheric benzene emissions from specific sources. In this estimate it was assumed that individuals residing in the vicinity of benzene sources spend 24 hours of each day in the same locations. To estimate more representative exposures, a second objective was added--to make rough estimates of individuals' total exposures by defining total exposure as the sum of exposures to all benzene sources including those in nonresidential areas, within a designated period.

Descriptors: Exposure assessment, Benzene, Gasoline marketing, Chemical industry, Petroleum refineries, Coke ovens

PB-284 297 PC A05/MF A01
Source Assessment: Coal Storage Piles
EPA, Cincinnati, OH, IERL
Monsanto Research Corp.
T. R. Blackwood, R. A. Wachter
May 78, 98p, EPA-600/2-78-004K

Abstract: See PB-252 356

Descriptors: Source assessment, Coal storage

PB-284 378 PC A02/MF A01
Monitoring for Polychlorinated Biphenyl Emissions from an Electrolytic Capacitor Disposal Project
EPA, Research Triangle Park, NC, EMSL
E. Rodes, D. Jackson, G. Lewis
May 78, 23p, EPA-600/4-78-025

Three different air sampling methods were used simultaneously to monitor for PCB emissions arising from a pilot disposal project involving electrolytic capacitors. Analytical results indicated that the primary polychlorinated biphenyl material was Aroclor 1242, and that airborne concentrations inside the building housing the grinders exceeded 5wg/cu m. The PCB air concentrations outside the building at a distance of 9m were typically <1.0 microgram/cu m. Measurements made with one low-volume and two high-volume air samples are compared.

Descriptors: Source sampling/ambient monitoring methodology, Hazardous waste disposal, Polychlorinated biphenyls (PCB)

PB-285 000 PC A07/MF A01
Kepone Incineration Test Program
EPA, Cincinnati, Ohio, MERL
Design Partnership
B.A. Bell, F.C. Whitmore
May 78, 148p, EPA-600/2-78-108

The Kepone Incineration Test (KIT) program was undertaken to evaluate incineration as a method of destroying Kepone and Kepone-containing materials and to determine the range of operating variables required for complete destruction. The program was divided into two phases: (a) experiments involving the direct injection of low BTU solutions of Kepone into the afterburner, and (b) experiments involving the coincineration of sewage sludge and various amounts of Kepone injected into a rotary kiln. Each phase was designed so that succeeding experiments involved longer amounts of Kepone and/or alterations in afterburner temperature and residence time.

Descriptors: Source assessment, Incinerators, Combustion, Hazardous waste disposal, Kepone

PB-285 210 PC A04/MF A01
Source Assessment: Crushed Sandstone, Quartz, and Quartzite, State of the Art
EPA, Cincinnati, OH, IERL
Monsanto Research Corp.
P. K. Chalekode, T. R. Blackwood, R. A. Wachter
May 78, 69p, EPA-600/2-78-004N

Abstract: See PB-252 356

Descriptors: Source assessment, Silica, Mineral industry

PB-285 662 PC A07/MF A01
Source Assessment: Chemical and Fertilizer Mineral Industry, State of the Art
EPA, Cincinnati, OH, IERL
Monsanto Research Corp.
J. C. Ochsner, T. R. Blackwood
June 78, 137p, EPA-600/2-78-004P

Abstract: PB-252 356

Descriptors: Source assessment, Nonmetallic mineral industry, Fertilizer industry, Chemical industry

PB-286 155 PC A11/MF A01
Electric Utility Steam Generating Units: Background Information for Proposed NO_x Emission Standards
EPA, Research Triangle Park, NC, OAQPS
Jul 78, 226p, EPA-450/2-78-005A

Abstract: See PB-202 459

Descriptors: NSPS, Electric power plants

PB-286 159 PC A06/MF A01
Utility Steam Generating Units: Background Information for Proposed SO_2 Emission Standards
EPA, Research Triangle Park, NC, OAQPS
Aug 78, 107p, EPA-450/2-78-007A-1

Abstract: See PB-202 459

Descriptors: NSPS, Electric power plants

PB-286 224 PC A09/MF A01
Electric Utility Steam Generating Units - Particulate Matter, Background Information for Proposed Emission Standards
EPA, Research Triangle Park, NC, OAQPS
Jul 78, 182p, EPA-450/2-78-006A

Abstract: See PB-202 459

Descriptors: NSPS, Electric power plants

PB-286 225 PC A21/MF A01
Electric Utility Steam Generating Units - Background Information for Proposed SO_2 Emission Standards
EPA, Research Triangle Park, NC, OAQPS
MITRE Corp.
Jul 78, 488p, EPA-450/2-78-007A

Abstract: See PB-202 459

Descriptors: NSPS, Electric power plants

PB-288 161 PC A05/MF A01
Source Assessment: Acrylic Acid Manufacture: State of the Art
EPA, Cincinnati, OH, IERL
Monsanto Research Corp.
R. W. Serth, D. R. Tierney, T. W. Hughes
Aug 78, 85p, EPA-600/2-78-004W

Abstract: See PB-252 356

Descriptors: Source assessment, Acrylic acid manufacturing, Chemical industry, Acetaldehyde, Acetic acid, Acetone acrolein, Acrylic acid, Benzene, Phenol, Propane, Propylene

PB-288 210 PC A04/MF A01
Source Assessment: Coal Refuse Piles, Abandoned Mines and Outcrops, State of the Art
EPA, Cincinnati, OH, IERL
Monsanto Research Corp.
P. K. Chalekode, T. R. Blackwood
Jul 78, 52p, EPA-600/2-78-004V

Abstract: See PB-252 356

Descriptors: Source assessment, Hydrogen sulfide, Ammonia, Polycyclic organic matter, Combustion, Mining

PB-288 497 PC A05/MF A01
Source Assessment: Open Mining of Coal, State of the Art
EPA, Cincinnati, OH, IERL
Monsanto Research Corp.
S. J. Rusek, et al.
Sep 78, 90p, EPA-600/2-78-004X

Abstract: See PB-252 356

Descriptors: Silicon dioxide, Methane, Source assessment, Mining

PB-289 788 PC A04/MF A01
Source Assessment: Transport of Sand and Gravel
EPA, Cincinnati, OH, IERL
Monsanto Research Corp.
J. C. Ochsner, P. K. Chalekode, T. R. Blackwood
Oct 78, 63p, EPA-600/2-78-004Y

Abstract: See PB-252 356

Descriptors: Source assessment, Silica, Cargo transport

PB-289 877 PC A04/MF A01
A Review of Standards of Performance for New Stationary Sources-Iron and Steel Plants/Basic Oxygen Furnaces
EPA, Research Triangle Park, NC, OAQPS
MITRE Corp.
M. Drabkin, R. Helfand
Nov 78, 72p, EPA-450/3-78-116

Abstract: See PB-202 459

Descriptors: NSPS, Iron and steel industry, Basic oxygen process furnaces

PB-290 125 PC A05/MF A01
Source Assessment: Charcoal Manufacturing, State of the Art.
EPA, Cincinnati, OH, IERL
Monsanto Research Corp.
C. M. Moscowitz
Dec 78, 90p, EPA-600/2-78-004Z

Abstract: See PB-252 356

Descriptors: Source assessment, Charcoal manufacturing

PB-291 639 PC A06/MF A01
Source Assessment: Industrial Process Profiles for Environmental Use: Chapter 2. Oil and Gas Production Industry
EPA, Cincinnati, OH, IERL
Radian Corp.
G. E. Wilkins
Feb 77, 112p EPA-600/2-77-023B

Abstract: See PB-266 224

Descriptors: Source assessment, Oil and gas industry

PB-291 640 PC A15/MF A01
Industrial Process Profiles for Environmental Use: Chapter 10. Plastics and Resins Industry
EPA, Cincinnati, OH, IERL
Radian Corp.
G. E. Wilkins
Feb 77, 326p, EPA-600/2-77-023J

Abstract: PB-266 224

Descriptors: Source assessment, Plastics industry, Resins industry, Chemical industry

PB-291 641 PC A06/MF A01
Industrial Process Profiles for Environmental Use. Chapter 12. The Explosives Industry
EPA, Cincinnati, OH, IERL
Radian Corp.
C. E. Hudak, T. B. Parsons
Feb 77, 122p, EPA-600/2-77-023L

Abstract: See PB-266 224

Descriptors: Source assessment, Explosives industry, Chemical industry

PB-291 642 PC A04/MF A01
Industrial Process Profiles for Environmental Use: Chapter 13, Plasticizers Industry
EPA, Cincinnati, OH, IERL
Radian Corp.
C. M. Thompson
Feb 77, 70p, EPA-600/2-77-023M

Abstract: See PB-266 224

Descriptors: Source assessment, Plasticizer industry, Chemical industry

PB-291 747 PC A08/MF A01
Source Assessment: Noncriteria Pollutant Emissions (1978 Update)
EPA, Research Triangle Park, NC, IERL
Monsanto Research Corporation
E. C. Eimutis, R. P. Quill, G. M. Rinaldi
Jul 78, 152p, EPA-600/2-78-004T

The report lists stationary sources that emit each of 389 noncriteria pollutants. It also indicates quantities of such emissions. The list was prepared using a computerized data base established for emissions of air pollutants from approximately 800 stationary source types in the combustion, organic materials, inorganic materials, and open source categories. (A source type is defined as a group of emission sources which have the same process and emission characteristics).

Descriptors: Source assessment, Organic compounds, Inorganic compounds

PB-292 278 PC A05/MF A01
A Review of Standards of Performance for New Stationary Sources-Sulfuric Acid Plants
EPA, Research Triangle Park, NC, OAQPS
MITRE Corp.
M. Drabkin, K. J. Brooks
Jan 79, 90p, EPA-450/3-79-003

Abstract: See PB-202 459

Descriptors: NSPS, Chemical industry, Sulfuric acid plants

PB-294 938 PC A15/MF A01
Primary Aluminum: Draft Guidelines for Control of Fluoride Emissions from Existing Primary Aluminum Plants
EPA, Research Triangle Park, NC, OAQPS
Feb 79, 345p, EPA-450/2-78-049A

This document serves as a text to State agencies in planning for control of fluoride emissions from existing primary aluminum plants. Achievable fluoride capture or removal efficiencies are given for new retrofit hooding and for primary and secondary removal devices, respectively. Methods for deriving capital and annualized costs are illustrated by a few examples. Costs and fluoride emission reductions achieved by actual retrofits are given for ten plants, and the construction scope of work is described in detail for three of these plants. The guidelines are presented as recommended control technologies that will achieve certain average control efficiencies when applied as new retrofits to existing plants.

Descriptors: NSPS, Fluorides, Aluminum industry, Metal industry

PB-294 962 PC A04/MF A01
A Review of Standards of Performance for New Stationary Sources - Nitric Acid Plants
EPA, Research Triangle Park, NC, OAQPS
MITRE Corp
M. Drabkin
Jan 79, 75p, EPA-450/3-79-013

Abstract: See PB-202 459

Descriptors: NSPS, Chemical industry, Nitric acid plants

PB-295 649 PC A07/MF A01
Source Assessment: Residential Combustion of Coal
EPA, Research Triangle Park, NC, IERL
Monsanto Research Corp.
D. G. DeAngelis, R. B. Reznik
Jan 79, 145p, EPA-600/2-79-019A

Abstract: See PB-252 356

Descriptors: Source assessment, Polycyclic organic matter, Residential buildings, Combustion

PB-296 135 PC A10/MF A01
Kraft Pulping - Control of TRS Emissions from Existing Mills
EPA, Research Triangle Park, NC, OAQPS
Mar 79, 212p, EPA-450/2-78-003B

Guidelines to aid the State in their preparation of plans for the control of emissions of total reduced sulfur (TRS) from existing kraft pulp mills are being published under the authority of Section 111(d) of the Clean Air Act. TRS emissions from kraft pulp mills are extremely odorous, and there are numerous instances of poorly controlled mills creating public odor problems. Adoption of these emission guidelines by the States would result in an overall reduction of about 80 percent in nationwide TRS emissions from kraft pulp mills.

Descriptors: NSPS, Sulfur compounds, Pulp mills

PB-296 953 PC A05/MF A01
A Review of Standards for New Stationary Sources - Secondary Brass and Bronze Plants
EPA, Research Triangle Park, NC, OAQPS
MITRE Corp.
E. L. Keitz, K. J. Brooks
Jun 79, 88p, EPA-450/3-79-011

Abstract: See PB-202 459

Descriptors: Brass and bronze plants, Smelters, Metal industry

PB-298 427 PC A08/MF A01
Source Assessment: A Review of Standards of Performance for New Stationary Sources - Asphalt Concrete Plants
EPA, Research Triangle Park, NC, OAQPS
MITRE Corp.
K. J. Brooks, E. L. Keitz, J. Watson
Jun 79, 152p, EPA-450/3-79-014

Abstract: See PB-202 459

Descriptors: NSPS, Asphalt industry, Concrete plants

PB-298 510 PC A15/MF A01
Electric Utility Steam Generating Units: Background Information for Promulgated Emission Standards
EPA, Research Triangle Park, NC, OAQPS
Jun 79, 341p, EPA-450/3-79-021

Abstract: See PB-202 459

Descriptors: NSPS, Electric power plants

PB-298 528 PC A13/MF A01
Glass Manufacturing Plants, Background Information: Proposed Standards of Performance. Volume I
EPA, Research Triangle Park, NC, OAQPS
Jun 79, 280p, EPA-450/3-79-005A

Abstract: See PB-202 459

Descriptors: NSPS, Glass industry

PB-300 480 PC A05/MF A01
A Review of Standards of Performance for New Stationary Sources - Petroleum Refineries
EPA, Research Triangle Park, NC, OAQPS
Mitre Corp.
K. Barrett, A. Goldfarb
Jan 79, 91p, EPA-450/3-79-008

Abstract: See PB-202 459

Descriptors: NSPS, Petroleum refineries

PB-300 681 PC A10/MF A01
Source Assessment: Phosphate Fertilizer Industry
EPA, Research Triangle Park, NC, IERL
Monsanto Research Corp.
J. M. Nyers, et al.
May 79, 203p, EPA-600/2-79-019C

Abstract: See PB-252 356

Descriptors: Source assessment, Fluorides, Ammonia, Fertilizer industry, Chemical industry

PB80-112089 PC A05/MF A01
A Review of Standards of Performance for New Stationary Sources - Portland Cement Industry
EPA, Research Triangle Park, NC, OAQPS
MITRE Corp.
K. W. Barrett
Oct 78, 83p, EPA-450/3-79-012

Abstract: See PB-202 459

Descriptors: NSPS, Cement industry

PB80-123540 PC A15/MF A01
Automobile and Light-Duty Truck Surface Coating Operations-Background Information for Proposed Standards
EPA, Research Triangle Park, NC, OAQPS
Sep 79, 330p, EPA-450/3-79-030

Abstract: See PB-202 459

Descriptors: NSPS, Coating operations, Automobile industry

PB80-124787 PC A04/MF A01
A Review of Standards of Performance for New Stationary Sources - Incinerators
EPA, Research Triangle Park, NC, OAQPS
MITRE Corp.
R. M. Helfand
Mar 79, 64p, EPA-450/3-79-009

Abstract See PB-202 459

Descriptors: NSPS, Incinerators, Combustion

PB80-125446 PC A04/MF A01
A Review of Standards of Performance for New Stationary Sources - Sewage Sludge Incinerators
EPA, Research Triangle Park, N.C., OAQPS
MITRE Corp.
R.M. Helfand, Mar 79, 70p, EPA-45073-79-010

Abstract: See PB-202 459

Descriptors: NSPS, Incinerators, Sewage sludge incinerators, Combustion

PB80-126022 PC A04/MF A01
Standard Support and Environmental Impact Statement. Volume II: Promulgated Standards of Performance for Stationary Gas Turbines
EPA, Research Triangle Park, N.C., OAQPS
Sep 79, 64p, EPA-450/2-77-017B

Abstract: See PB-202 459

Descriptors: NSPS, Gas turbines

PB80-128812 PC A07/MF 101
Source Assessment: Solvent Evaporation - Degreasing Operations
EPA, Cincinnati, OH, IERL
Monsanto Research Corp.
T. J. Hoogheem, et al.
Aug 79, 133p, EPA-600/2-79-019F

Abstract: See PB-252 356

Descriptors: Source assessment, Methylene chloride, Perchloroethylene, Solvents, Degreasing operations

PB80-131485 PC A09/MF A01
Source Assessment: Analysis of Uncertainty -- Principles and Applications
EPA, Research Triangle Park, NC, IERL
Monsanto Research Corp.
R. W. Serth, et al.
Aug 78, 181p, EPA-600/2-78-004U

The report provides the results of a study that was conducted to analyze the uncertainties involved in the calculation of the decision parameters used in the Source Assessment Program and to determine the effect of these uncertainties on the decision-making procedure. A general procedure for performing an analysis of uncertainty is developed based on the principles of error propagation and statistical inference. It is shown that this simple and straightforward method represents an approximation to standard statistical techniques. The approximate method is illustrated by application to four problems in the area of environmental control. The general procedure is used to establish guidelines for conducting air emissions studies in the Source Assessment Program. In particular, guidelines are established for precision in field sampling and analytical work, and for setting critical values of decision parameters.

Descriptors: Source assessment

PB80-137912 PC A13/MF A01
Organic Solvent Cleaners - Background Information for Proposed Standards .
EPA, Research Triangle Park, NC, OAQPS
GCA Corp.
Oct 79, 282p, EPA-450/2-78-045A

Abstract: See PB-202 459

Descriptors: NSPS, Trichloroethylene, Perchloroethylene, Methylene chloride, 1,1,1-Trichloroethane, Trichlorotrifluoroethane, Solvent cleaning facilities, Cleaners, Degreasing operations

PB80-138209 PC A09/MF A01
Source Assessment: Chlorinated Hydrocarbons Manufacture
EPA, Research Triangle Park, NC, IERL
Monsanto Research Corp.
Z. S. Khan, T. W. Hughes
Aug 79, 191p, EPA-600/2-79-019G

Abstract: See PB-252 356

Descriptors: Source assessment, Chlorinated hydrocarbon manufacturing, Chemical industry, Chloroethanes, Chloromethanes, Phosgene, Carbon tetrachloride, Chloroform, Epichlorohydrin, Propylene oxide

PB80-140163 PC A14/MF A01
Ammonium Sulfate Manufacture - Background Information for Proposed Emission Standards
EPA, Research Triangle Park, NC, OAQPS
Dec 79, 321p, EPA-450/3-79-034A

Abstract: See PB-202 459

Descriptors: NSPS, Ammonium sulfate plants, Chemical industry

PB80-141625 PC A17/MF A01
Phosphate Rock Plants - Background Information for Proposed Standards
EPA, Research Triangle Park, NC, OAQPS
Sep 79, 381p, EPA-450/3-79-017A

Abstract: See PB-202 459

Descriptors: NSPS, Phosphate industry

PB80-146293 PC E99
Status Assessment of Toxic Chemicals
EPA, Cincinnati, OH, IERL
Monsanto Research Corp.
Dec 79, 570p-in 15 repts
Set includes PB80-146301, PB80-146319, PB80-146327, PB80-146335, PB80-146343, PB80-146350, PB80-146368, PB80-146376, PB80-146384, PB80-146392, PB80-146400, PB80-146418, PB80-146426, PB80-146434, and PB80-146442.

Abstract: See PB80-146301

Descriptor: Source assessment

PB80-146301 PC A03/MF A01
Status Assessment of Toxic Chemicals: Acrylonitrile
EPA, Cincinnati, OH, IERL
Monsanto Research Corp.
D. R. Tierney, T. R. Blackwood, G. E. Wilkins
Dec 79, 34p, EPA-600/2-79-210A

This document—is one of a series entitled Status Assessments of Toxic Chemicals. Each report in the series deals with a different chemical, but all the reports address the same topics and are similar in format. The properties, processes, and uses of the chemical are discussed. Control technologies are evaluated, and data on sources and emissions are presented. Possible health effects of exposure to the chemical are identified. Finally, a history of regulation of the chemical is given, and areas in which information is lacking are identified.

Descriptors: Source assessment, Acrylonitrile, Chemical industry, Plastics industry

PB80-146319 PC A03/MF A01
Status Assessment of Toxic Chemicals: Arsenic
EPA, Cincinnati, OH, IERL
Monsanto Research Corp.
T. R. Blackwood, S. R. Archer, T. K. Corwin
Dec 79, 47p, EPA-600/2-79-210B

Abstract: See PB80-146301

Descriptors: Source assessment, Arsenic, Chemical industry

PB80-146327 PC A03/MF A01
Status Assessment of Toxic Chemicals: Asbestos
EPA, Cincinnati, OH, IERL
Monsanto Research Corp.
S. R. Archer, T. R. Blackwood.
Dec 77, 33p, EPA-600/2-79-210C

Abstract: See PB80-146301

Descriptors: Source assessment, Asbestos, Chemical industry

PB80-146335 PC A03/MF A01
Status Assessment of Toxic Chemicals: Benzene
EPA, Cincinnati, OH, IERL
Monsanto Research Corp.
J. C. Ochsner, T. R. Blackwood, L. D. Zeagler
Dec 79, 50p, EPA-600/2-79-210D

Abstract: See PB80-146301

Descriptors: Source assessment, Benzene, Chemical industry, Combustion

PB80-146343 PC A03/MF A01
Status Assessment of Toxic Chemicals: Benzidine
EPA, Cincinnati, OH, IERL
Monsanto Research Corp.
S. R. Archer, T. R. Blackwood, N. P. Meserole
Dec 79, 31p, EPA-600/2-79-210E

Abstract: See PB80-146301

Descriptors: Source assessment, Benzidine, Chemical industry

PB80-146350 PC A03/MF A01
Status Assessment of Toxic Chemicals: Cadmium
EPA, Cincinnati, OH, IERL
Monsanto Research Corp.
D. R. Tierney, T. R. Blackwood, R. D. Wilson
Dec 79, 34p, EPA-600/2-79-210F

Abstract: See PB80-146301

Descriptors: Source assessment, Cadmium, Chemical industry, Smelters

PB80-146368 PC A03/MF A01
Status Assessment of Toxic Chemicals: Hexachlorobenzene
EPA, Cincinnati, OH, IERL
Monsanto Research Corp.
T. R. Blackwood, T. G. Sipes
Dec 79, 30p, EPA-600/2-79-210G

Abstract: See PB80-146301

Descriptors: Source assessment, Hexachlorobenzene, Chemical industry

PB80-146376 PC A03/MF A01
Status Assessment of Toxic Chemicals: Lead
EPA, Cincinnati, OH, IERL
Monsanto Research Corp.
D. R. Tierney, T. R. Blackwood, T. M. Briggs
Dec 79, 48p, EPA-600/2-79-210H

Abstract: See PB80-146301

Descriptors: Source assessment, Lead smelters, Chemical industry, Smelters, Lead

Descriptors: NSPS, Ammonium sulfate plants, Chemical industry

PB80-141625 PC A17/MF A01
Phosphate Rock Plants - Background Information for Proposed Standards
EPA, Research Triangle Park, NC, OAQPS
Sep 79, 381p, EPA-450/3-79-017A

Abstract: See PB-202 459

Descriptors: NSPS, Phosphate industry

PB80-146293 PC E99
Status Assessment of Toxic Chemicals
EPA, Cincinnati, OH, IERL
Monsanto Research Corp.
Dec 79, 570p-in 15 repts
Set includes PB80-146301, PB80-146319, PB80-146327, PB80-146335, PB80-146343, PB80-146350, PB80-146368, PB80-146376, PB80-146384, PB80-146392, PB80-146400, PB80-146418, PB80-146426, PB80-146434, and PB80-146442.

Abstract: See PB80-146301

Descriptor: Source assessment

PB80-146301 PC A03/MF A01
Status Assessment of Toxic Chemicals: Acrylonitrile
EPA, Cincinnati, OH, IERL
Monsanto Research Corp.
D. R. Tierney, T. R. Blackwood, G. E. Wilkins
Dec 79, 34p, EPA-600/2-79-210A

This document is one of a series entitled Status Assessments of Toxic Chemicals. Each report in the series deals with a different chemical, but all the reports address the same topics and are similar in format. The properties, processes, and uses of the chemical are discussed. Control technologies are evaluated, and data on sources and emissions are presented. Possible health effects of exposure to the chemical are identified. Finally, a history of regulation of the chemical is given, and areas in which information is lacking are identified.

Descriptors: Source assessment, Acrylonitrile, Chemical industry, Plastics industry

PB80-146319 PC A03/MF A01
Status Assessment of Toxic Chemicals: Arsenic
EPA, Cincinnati, OH, IERL
Monsanto Research Corp.
T. R. Blackwood, S. R. Archer, T. K. Corwin
Dec 79, 47p, EPA-600/2-79-210B

Abstract: See PB80-146301

Descriptors: Source assessment, Arsenic, Chemical industry

PB80-146327 PC A03/MF A01
Status Assessment of Toxic Chemicals: Asbestos
EPA, Cincinnati, OH, IERL
Monsanto Research Corp.
S. R. Archer, T. R. Blackwood.
Dec 77, 33p, EPA-600/2-79-210C

Abstract: See PB80-146301

Descriptors: Source assessment, Asbestos, Chemical industry

PB80-146335 PC A03/MF A01
Status Assessment of Toxic Chemicals: Benzene
EPA, Cincinnati, OH, IERL
Monsanto Research Corp.
J. C. Ochsner, T. R. Blackwood, L. D. Zeagler
Dec 79, 50p, EPA-600/2-79-210D

Abstract: See PB80-146301

Descriptors: Source assessment, Benzene, Chemical industry, Combustion

PB80-146343 PC A03/MF A01
Status Assessment of Toxic Chemicals: Benzidine
EPA, Cincinnati, OH, IERL
Monsanto Research Corp.
S. R. Archer, T. R. Blackwood, N. P. Meserole
Dec 79, 31p, EPA-600/2-79-210E

Abstract: See PB80-146301

Descriptors: Source assessment, Benzidine, Chemical industry

PB80-146350 PC A03/MF A01
Status Assessment of Toxic Chemicals: Cadmium
EPA, Cincinnati, OH, IERL
Monsanto Research Corp.
D. R. Tierney, T. R. Blackwood, R. D. Wilson
Dec 79, 34p, EPA-600/2-79-210F

Abstract: See PB80-146301

Descriptors: Source assessment, Cadmium, Chemical industry, Smelters

PB80-146368 PC A03/MF A01
Status Assessment of Toxic Chemicals: Hexachlorobenzene
EPA, Cincinnati, OH, IERL
Monsanto Research Corp.
T. R. Blackwood, T. G. Sipes
Dec 79, 30p, EPA-600/2-79-210G

Abstract: See PB80-146301

Descriptors: Source assessment, Hexachlorobenzene, Chemical industry

PB80-146376 PC A03/MF A01
Status Assessment of Toxic Chemicals: Lead
EPA, Cincinnati, OH, IERL
Monsanto Research Corp.
D. R. Tierney, T. R. Blackwood, T. M. Briggs
Dec 79, 48p, EPA-600/2-79-210H

Abstract: See PB80-146301

Descriptors: Source assessment, Lead smelters, Chemical industry, Smelters, Lead

PB80-146384 PC A03/MF A01
Status Assessment of Toxic Chemicals: Mercury
EPA, Cincinnati, OH, IERL
Monsanto Research Corp.
D. R. Tierney, T. R. Blackwood T. M. Briggs
Dec 79, 37p, EPA-600/2-79-210I

Abstract: PB80-146301

Descriptors: Source assessment, Mercury, Chemical industry

PB80-146392 PC A03/MF A01
Status Assessment of Toxic Chemicals: Phosphates
EPA, Cincinnati, OH, IERL
Monsanto Research Corp.
J. C. Ochsner, T. R. Blackwood
Dec 79, 34p, EPA-600/2-79-210J

Abstract: See PB80-146301

Descriptors: Source assessment, Phosphates, Chemical industry

PB80-146400 PC A03/MF A01
Status Assessment of Toxic Chemicals: Polybrominated Biphenyls
EPA, Cincinnati, OH, IERL
Monsanto Research Corp.
S. R. Archer, T. R. Blackwood, C. S. Collins
Dec 79, 33p, EPA-600/2-79-210K

Abstract: See PB80-146301

Descriptors: Source assessment, Polybrominated biphenyls, Textile industry

PB80-146418 PC A03/MF A01
Status Assessment of Toxic Chemicals: Polynuclear Aromatic Hydrocarbons
EPA, Cincinnati, OH, IERL
Monsanto Research Corp.
S. R. Archer, T. R. Blackwood, G. E. Wilkins
Dec 79, 48p, EPA-600/2-79-210L

Abstract: See PB80-146301

Descriptors: Source assessment, Polynuclear aromatic hydrocarbons, Chemical industry, Dyes and pigments industry

PB80-146426 PC A03/MF A01
Status Assessment of Toxic Chemicals: Trichlorethylene
EPA, Cincinnati, OH, IERL
Monsanto Research Corp.
J. C. Ochsner, T. R. Blackwood, W. C. Micheletti
Dec 79, 38p, EPA-600/2-79-210M

Abstract: See PB80-146301

Descriptors: Source assessment, Trichloroethylene, Chemical industry, Textile industry, Food industry

PB80-146434 PC A03/MF A01
Status Assessment of Toxic Chemicals: Tris(2,3-Dibromopropyl) Phosphate
EPA, Cincinnati, OH, IERL
Monsanto Research Corp.
S. R. Archer, T. R. Blackwood, P. J. Murin
Dec 79, 27p, EPA-600/2-79-210N

Abstract: See PB80-146301

Descriptors: Source assessment, Tris(2,3-dibromopropyl) phosphate, Chemical industry, Textile industry

PB80-146442 PC A03/MF A01
Status Assessment of Toxic Chemicals: Vinylidene Chloride
EPA, Cincinnati, OH, IERL
Monsanto Research Corp.
D. R. Tierney, T. R. Blackwood, M. R. Piana
Dec 79, 37p, EPA-600/2-79-210O

Abstract: See PB80-146301

Descriptors: Source assessment, Vinylidene chloride, Chemical industry

PB80-150592 PC A09/MF A01
Source Assessment: Manufacture of Acetone and Phenol from Cumene
EPA, Research Triangle Park, NC, IERL
Monsanto Research Corp.
J. L. Delaney, T. W. Hughes
May 79, 200p, EPA-600/2-79-019D

Abstract: See PB-252 356

Descriptors: Source assessment, Acetone manufacturing, Phenol manufacturing, Chemical industry

PB80-152812 PC A09/MF A01
Benzene Emissions from Maleic Anhydride Industry - Background Information for Proposed Standards
EPA, Research Triangle Park, NC, OAQPS
Feb 80, 200p, EPA-450/3-80-001A

A National Emission Standard for the control of benzene emissions from maleic anhydride plants is being proposed under the authority of section 112 of the Clean Air Act. The proposed standard would apply to both new and existing sources. This document contains background information and environmental and economic assessments of the regulatory alternatives considered in developing the proposed standards.

Descriptors: NESHAP, Benzene, Maleic anhydride plants, Chemical industry

PB80-153885 PC MF A01
Assessment of Human Exposures to Atmospheric Cadmium
EPA, Research Triangle Park, NC, OAQPS
Energy and Environmental Analysis, Inc.
R. Coleman, et al.
Jun 79, 138p, EPA-450/5-79-007

The report is one of a series of reports which will be used by EPA in responding to the Congressional mandate under the Clear Air Act Amendments of 1977 to determine whether atmospheric emissions of cadmium pose a threat to public health. The report identifies the population exposed to specified cadmium levels from selected point sources. The sources considered are iron and steel mills, municipal incinerators, primary smelters (zinc, copper, lead, and cadmium), and secondary smelters (copper and zinc). Municipal incinerators are the chief contributors to the total population exposed. Primary zinc and primary copper smelters are estimated to cause the highest concentrations.

Descriptors: Exposure assessment, Cadmium, Iron and steel industry, Incinerators, Smelters, Combustion

PB80-153935 PC A15/MF A01
Primary Aluminum: Guidelines for Control of Fluoride Emissions from Existing Primary Aluminum Plants
EPA, Research Triangle Park, NC, OAQPS
Dec 79, 346p, EPA-450/2-78-049B

This document serves as a text to State agencies in planning for control of fluoride emissions from existing primary aluminum plants. Achievable fluoride capture and removal efficiencies are given for new retrofit hooding and for primary and secondary removal devices, respectively. Methods for deriving capital and annualized costs are illustrated by a few examples. Costs and fluoride emission reductions achieved by actual retrofits are given for ten plants, and the construction scope of work is described in detail for three of these plants. The guidelines are presented as recommended control technologies that will achieve certain average control efficiencies when applied as new retrofits to existing plants.

Descriptors: NSPS, Fluorides, Aluminum industry, Metal industry

PB80-154065 PC A07/MF A01
A Review of Standards of Performance for New Stationary Sources - Secondary Lead Smelters
EPA, Research Triangle Park, NC, OAQPS
MITRE Corp.
J. W. Watson, K. J. Brooks
Mar 79, 131p, EPA-450/3-79-015

Abstract: See PB-202 459

Descriptors: NSPS, Smelters, Lead smelters

PB80-154602 PC A04/MF A01
Review of Standards of Performance for Electric Arc Furnaces in Steel Industry
EPA, Research Triangle Park, NC, OAQPS
Oct 79, 59p, EPA-450/3-70-033

Abstract: See PB-202 459

Descriptors: NSPS, Iron and Steel industry, Electric arc furnaces

PB80-177207 PC A09/MF A01
Source Assessment: Dry Bottom Industrial Boilers Firing Pulverized Bituminous Coal
EPA, Research Triangle Park, NC, IERL
Monsanto Research Corp.
W. R. McCurley, et al.
Jun 79, 199p, EPA-600/2-79-019E

Abstract: See PB-252 356

Descriptors: Source assessment, Polycyclic organic matter, Boilers, Combustion

PB80-181472 PC A06/MF A01
Source Assessment: Prescribed Burning, State of the Art
EPA, Research Triangle Park, NC, IERL
Monsanto Research Corp.
C. T. Chi, et al.
Nov 79, 122p, EPA-600/2-79-019H

Abstract: See PB-252 356

Descriptors: Source assessment, Combustion, Forestry, Open burning

PB80-192479 PC A03/MF A01
Primary Aluminum - Background Information for Promulgated Amendments
EPA, Research Triangle Park, NC, OAQPS
Mar 80, 33p, EPA-450/3-79-026

Abstract: See PB-202 459

Descriptors: NSPS, Aluminum industry, Metal industry

PB80-194152 PC A15/MF A01
Standards Support and Environmental Impact Statement Volume 1: Proposed Standards of Performance for Grain Elevator Industry
EPA, Research Triangle Park, NC, OAQPS
Jan 77, 348p, EPA-450/2-77-001A

Abstract: See PB-202 459

Descriptors: NSPS, Grain elevators, Agriculture

PB80-194491 PC A02/MF A01
Standards Support (Final) and Environmental Impact Statement. Volume II: Promulgated Standards of Performance for Lime Manufacturing Plants
EPA, Research Triangle Park, NC, OAQPS
Oct 77, 24p, EPA-450/2-77-007B

Abstract: See PB-202 459

Descriptors: NSPS, Lime industry

PB80-198435 PC A05/MF A01
Standards Support and Environmental Impact Statement. Volume 2: Promulgated Standards of Performance for Grain Elevator Industry
EPA, Research Triangle Park, NC, OAQPS
Apr 78, 92p, EPA-450/2-77-001B

Abstract: See PB-202 459

Descriptors: NSPS, Grain elevators, Agriculture

PB80-202997 PC A14/MF A01
Electric Arc Furnaces in Ferrous Foundries - Background Information for Proposed Standards
EPA, Research Triangle Park, NC, OAQPS
May 80, 306p, EPA-450/3-80-020A

Abstract: See PB-202 459

Descriptors: NSPS, Iron and steel industry, Electric arc furnaces

PB80-208788 PC A13/MF A01
Chemical Hazard Information Profiles (CHIPs)
EPA, Washington, D.C., OPTS
Apr 80, 296p, EPA-560/11-80-011

This collection of 40 Chemical Hazard Information Profile (CHIP) reports was prepared by the Office of Pesticides and Toxic Substances (OPTS) between August 1, 1976, and November 20, 1979. Chemicals are chosen for CHIP preparation on the basis of information indicating potential for adverse health or environmental effects of significant exposure. The CHIP itself is a brief summary of readily available information concerning health and environmental effects and exposure potential of a chemical. Information gathering for a CHIP is generally limited to a search of secondary literature sources and is not intended to be exhaustive; however, in depth searches on specific topics may be done on a case-by-case basis. In general, no attempt is made to evaluate or validate information at this stage of assessment. Preparation of a CHIP is part of the first stage in the OPTS Chemical Risk Assessment Process. The purpose of the CHIP is to enable OPTS to make a tentative decision on an appropriate course of action for the subject chemical and to identify and characterize problems that may require more thorough investigation and evaluation.

Descriptors: Exposure assessment, Health assessment, Organic chemicals

PB80-209778 PC A02/MF A01
Reference Method 24-Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings. Reference Method 25-Determination of Total Gaseous Nonmethane Organic Emissions as Carbon. Background Information for Promulated Test Methods.
EPA, Research Triangle Park, NC, OAQPS
Jul 80, 22p, EPA-450/3-79-030C

Reference Method 24 is used to determine the volatile organic compound (VOC) content of coating materials, and Reference Method 25 is used to determine the percentage reduction of VOC emissions achieved by emission control devices. These methods were proposed on October 5, 1979, as an appendix to the proposed standards of performance for automobile and light-duty truck surface coating operations. This document contains information on the public comments made after proposal and EPA responses to the comments.

Descriptors: NSPS, Source sampling/ambient monitoring methodology, Organic compounds, Coating operations, Automobile industry

PB80-212111 PC A18/MF A01
Asphalt Roofing Manufacturing Industry - Background Information for Proposed Standards.
EPA, Research Triangle Park, NC, OAQPS
Jun 80, 419p, EPA-450/3-80-021A

Abstract: See PB-202 459

Descriptors: NSPS, Asphalt industry, Roofing, Construction

PB80-219678 PC A15/MF A01
Sodium Carbonate Industry - Background Information for Proposed Standards
EPA, Research Triangle Park, NC, OAQPS
Radian Corp.
Jun 80, 350p, EPA-450/3-80-029A

Abstract: See PB-202 459

Descriptors: NSPS, Sodium carbonate plants, Chemical industry

PB80-219686 PC A15/MF A01
Benzene Emissions from the Ethylbenzene/Styrene Industry-Background Information for Proposed Standards
EPA, Research Triangle Park, NC, OAQPS
Aug 80, 326p, EPA-450/3-79-035A

A National Emission Standard for the control of benzene emissions from ethylbenzene/styrene plants is being proposed under the authority of Section 112 of the Clear Air act. The proposed standard would apply to both new and existing sources. This document contains background information and environmental and economic assessments of the regulatory alternatives considered in developing the proposed standard.

Descriptors: NESHAP, Benzene, Ethylbenzene/styrene plants, Chemical industry

PB80-225717 PC A05/MF A01
Industrial Process Profiles for Environmental Use: Chapter 28. Primary Zinc Industry
PEDCo-Environmental Inc.
Jul 80, 89p, EPA-600/2-80-169.

Abstract: See PB-266 224

Descriptors: Source assessment, Zinc industry, Metal industry

PB81-100497 PC A08/MF A01
Perchloroethylene Dry Cleaners - Background Information for Proposed Standards
EPA, Research Triangle Park, NC, OAQPS
TRW Environmental Engineering Div.
Aug 80, 171p, EPA-450/3-79-029A

Abstract: See PB-202 459

Descriptors: NSPS, Perchloroethylene, Dry cleaning

PB81-105942 PC A15/MF A01
Pressure Sensitive Tape and Label Surface Coating Industry - Background Information for Proposed Standards
EPA, Research Triangle Park, NC, OAQPS
Radian Corp.
Aug 80, 327p, EPA-450/3-80-003A

Abstract: See PB-202 459

Descriptors: NSPS, Coating operations, Adhesives industry

PB81-105967 PC A08/MF A01
Glass Manufacturing Plants - Background Information for Promulgated Standards of Performance
EPA, Research Triangle Park, NC, OAQPS
Sep 80, 175p, EPA-450/3-79-005B

Abstract: See PB-202 459

Descriptors: NSPS, Glass industry

PB81-108078 PC A10/MF A01
Source Assessment: Dry Bottom Utility Boilers Firing Pulverized Bituminous Coal
EPA, Research Triangle Park, NC, IERL
Monsanto Research Corp.
D. G. DeAngelis, et al.
Oct 80, 210p, EPA-600/2-80-042C

Abstract: See PB-252 356

Descriptors: Source assessment, Polycyclic organic matter, Boilers, Electric power plants, Combustion

PB81-110926 PC A05/MF A01
Industrial Process Profiles for Environmental Use: Chapter 27. Primary Lead Industry
EPA, Cincinnati, OH, IERL
PEDCo-Environmental, Inc.,
Jul 80, 83p, EPA-600/2-80-168

Abstract: See PB-266 224

Descriptors: Source assessment, Lead industry, Metal industry

PB81-113904 PC A10/MF A01
Beverage Can Surface Coating Industry - Background Information for Proposed Standards
EPA, Research Triangle Park, NC, OAQPS
Sep 80, 225p, EPA-450/3-80-036A

Abstract: See PB-202 459

Descriptors: NSPS, Coating operations, Can manufacturing

PB81-113920 PC A03/MF A01
Automobile and Light-Duty Truck Surface Coating Operations-Background Information for Promulgated Standards
EPA, Research Triangle Park, NC, OAQPS
Sep 80, 35p, EPA-450/3-79-030B

Abstract: See PB-202 459

Descriptors: NSPS, Coating operations, Automobile industry

PB81-113938 PC A18/MF A01
Surface Coating of Metal Furniture - Background Information for Proposed Standards
EPA, Research Triangle Park, NC, OAQPS
Sep 80, 406p, EPA-450/3-80-007A

Abstract: See PB-202 459

Descriptors: NSPS, Coating operations, Furniture industry

PB81-117145 PC A12/MF A01
Publication Rotogravure Printing - Background Information for Proposed Standards
EPA, Research Triangle Park, NC, OAQPS
Oct 80, 259p, EPA-450/3-80-031A

Abstract: See PB-202 459

Descriptors: NSPS, Printing

PB81-118747 PC A02/MF A01
Ammonium Sulfate Manufacture - Background Information for Promulgated Emission Standards
EPA, Research Triangle Park, NC, OAQPS
Oct 80, 22p, EPA-450/3-79-034B

Abstract: See PB-202 459

Descriptors: NSPS, Ammonium sulfate plants, Chemical industry

PB81-122129 PC A05/MF A01
Review of New Source Performance Standards for Phosphate Fertilizer Industry - Revised
EPA, Research Triangle Park, NC, OAQPS
Nov 80, 83p, EPA-450/3-79-038R

Abstract: See PB-202 459

Descriptors: NSPS, Fluorides, Fertilizer industry

PB81-123572 PC A10/MF A01
Metal Coil Surface Coating Industry - Background Information for Proposed Standards
EPA, Research Triangle Park, NC, OAQPS
Oct 80, 216p, EPA-450/3-80-035A

Abstract: See PB-202 459

Descriptors: NSPS, Coating operations, Metal industry

PB81-136160 PC A06/MF A01
Source Assessment: Residential Combustion of Wood
EPA, Research Triangle Park, N.C., IERL
Monsanto Research Corp.
D. G. DeAngelis, et al.
Mar 80, 102p, EPA-600/2-80-042B

Abstract: See PB-252 356

Descriptors: Source assessment, Polycyclic organic matter, Residential buildings, Combustion

PB81-151433 PC A13/MF A01
Benzene Emissions from Benzene Storage Tanks - Background Information for Proposed Standards
EPA, Research Triangle Park, NC, OAQPS
Dec 80, 277p, EPA-450/3-80-034A

Standards of Performance for the control of emissions from benzene storage tanks are being proposed under the authority of Section 112 of the Clean Air Act. These standards would apply to all new and existing storage tanks having the capacity of 4 cubic meters or larger, which are to be used for the storage of pure benzene. Existing sources will have to comply with the standards within 90 days of its effective date, unless a waiver of compliance is secured from the Administrator. This document contains background information and environmental and economic impact assessment of the regulatory alternatives considered in developing the proposed standards.

Descriptors: NESHAP, Benzene, Storage tanks, Petroleum refineries, Chemical industry

PB81-151664 PC A13/MF A01
Benzene Fugitive Emissions - Background Information for Proposed Standards
EPA, Research Triangle Park, NC, OAQPS
Nov 80, 292p, EPA-450/3-80-032A

A national emission standard for petroleum refining and organic chemical manufacturing industries is being proposed under authority of Section 112 of the Clean Air Act (42 U.S.C. 7412, as amended). The purpose of the proposed standard is to minimize benzene fugitive emissions in these industries. The document provides background information for the proposed standard. Control technologies and five regulatory alternatives are evaluated in terms of environmental and economic impacts on both new and existing emission sources. Included in the evaluation of economic impacts are estimates of total capital and annualized costs, including recovery credits.

Descriptors: NESHAP, Benzene, Petrolium refineries, Chemical industry

PB81-152167 PC A11/MF A01
VOC Fugitive Emissions in Synthetic Organic Chemicals Manufacturing Industry - Background Information for Proposed Standards
EPA, Research Triangle Park, NC, OAQPS
Nov 80, 245p, EPA-450/3-80-033A

Abstract: See PB-202 459

Descriptors: NSPS, Chemical industry, Fugitive emissions sources

PB81-157810 PC A05/MF A01
Review of Standards of Performance for New Stationary Sources - Ferroalloy Production Facilities
EPA, Research Triangle Park, NC, OAQPS
PEDCo - Environmental, Inc.
R. W. Gerstle, W. F. Kemner, L. V. Yerino
Dec. 80, 98p, EPA 450/3-80-041

Abstract: See PB-202 459

Descriptors: NSPS, Iron and steel industry

PB81-161937 PC A09/MF A01
Source Assessment: Cotton and Synthetic Woven Fabric Finishing
EPA, Research Triangle Park, NC, IERL
Monsanto Research Corp.
W. D. McCurley, G. D. Rawlings
Jan 80, 196p, EPA-600/2-80-042A

Abstract: See PB-252 356

Descriptors: Source assessment, Textile industry

PB81-164915 PC A08/MF A01
Industrial Process Profiles for Environmental Use: Chapter 29. Primary Copper Industry
EPA, Cincinnati, OH, IERL
PEDCo - Environmental, Inc.
Jul 80, 155p, EPA-600/2-80-170

Abstract: See PB-266 224

Descriptors: Source assessment, Copper industry, Metal industry

PB81-193278 PC A13/MF A01
Human Exposure to Atmospheric Concentrations of Selected Chemicals
EPA, Research Triangle Park, NC, OAQPS
SRI International
1980, 285p.

Population exposure was estimated for four chemicals emitted into the ambient air. The exposure assessments identify types and locations of sources of air population; estimate emissions, ambient concentrations, and surrounding populations; and provide rough, order-of-magnitude estimates of the number of people exposed to various concentrations of the individual chemicals on a nationwide basis.

Descriptors: Exposure assessment, Acrylonitrile

PB82-102476 PC A12/MF A01
Potential Atmospheric Carcinogens, Phase 2/3: Analytical Technique and Field Evaluation
EPA, Research Triangle Park, NC, ESRL
Monsanto Research Corp.
D. S. West, et al.
Jun 81, 267p, EPA-600/2-81-106

A sampling system was developed for collecting 20 significant probable or possible atmospheric carcinogens from ambient air. The sampling system is based on a combination of solid sorbent materials consisting of Tenax-GC, Porapak R, and Ambersorb XE-340 arranged in series. Air samples are drawn through the system using a Nutech Model 221-1A pump. The system was evaluated in sampling trips to Los Angeles, Niagara Falls, and Houston. The results for analyses for the 20 selected compounds as well as additional broad scan data are presented. Analyses of the samples were accomplished using thermal desorption of the sorbent materials followed by capillary column gas chromatography/mass spectrometry (GC/MS). A sample collected in Houston was also analyzed using a conventional flame ionization detector, a N-P flame ionization detector, a photoionization detector and an electron capture detector. A comparison of the GC/MS and multidetector GC results was made.

Descriptors: Source sampling/ambient monitoring methology

PB82-111816 PC A05/MF A01
Thermal Conversion of Municipal Wastewater Sludge, Phase II: Study of Heavy Metal Emissions
EPA, Cincinnati, OH, MERL
Interstate Sanitation Commission, New York
Sep 81, 96p, EPA-600/2-81-203

The object of this work was to compare and analyze heavy metal emissions associated with the thermal conversion (incineration) processes which can be conducted in a multiple-hearth furnace to dry municipal wastewater (sewage) sludge and reduce its volume by forming an ash or char. Sludge for this project was obtained from Jersey City, New Jersey. It contains about 8 percent solids which were increased to between 40 and 50 percent solid by adding polymer as a filter aid and filtering it in a 4 ft x 4 ft pilot filter press having expandable rubber diaphragm plates. A pilot scale multiple-hearth furnace, .91 m (36 inch) 10 x 6 hearth was used for the thermal conversion process. Sludge was subjected to thermal conversion at the conditions: (1) Incineration at 900C (1625F); (2) Low Temperature Conversion at 700C (1290F) (starved air combustion or pyrolysis); (3) High Temperature Conversion at 900C (1290F) (starved air combustion or pyrolysis). Results indicated that the low temperature conversion substantially retained cadmium, lead, and beryllium in the ash or char when compared to incineration. However, the ash retained far more silver during incineration than it did during high or low temperature conversion.

Descriptors: Source assessment, Incinerators, Sewage sludge incinerators, Combustion, Heavy metals, Cadmium, Lead

PB82-115163 PC A16/MF A01
Health Assessment Document for Cadmium
EPA, Research Triangle Park, NC,
L. D. Grant, et al.
Oct 81, 362p, EPA-600/8-81-023

This document provides a critical assessment of health effects and public health risks associated with environmental exposure to cadmium (Cd). Sources and routes of exposure are discussed and identified. Dose-effect/response relationships and populations at special risk are delineated. Cadmium is naturally present in most environmental media. Major anthropogenic sources are: (1) smelting and mining, (2) certain manufacturing processes, and (3) waste disposal operations. Food is the largest environmental source for most humans, although Cd intake from smoking can equal or exceed Cd intake from food. Acute non-lethal exposure is associated with chronic respiratory effects. However, since most environmental exposures to Cd are of a long-term, low-level type, primary emphasis has been placed on discussing effects of such chronic exposure. Cadmium's accumulation in the kidney results renal tubular dysfunction after many years of exposure. Estimates of the concentration of Cd in the renal cortex necessary to induce these effects and estimates of exposure necessary to produce the critical renal concentration vary widely, partially due to individual biological variability. Populations at special risk to Cd are cigarette smokers, as well as the older segments of the population (>50 years of age).

Descriptors: Health assessment, Cadmium

PB82-136847 PC A16/MF A01
Dioxins
EPA, Cincinnati, OH, IERL
PEDCo-Environmental, Inc.
M.P. Esposito, T.O. Tiernan, F.E. Dryden
Nov 80, 371p, EPA-600/2-80-197

This report deals with a group of hazardous chemical compounds known as dioxins. The extreme toxicity of one of these chemicals, 2,3,7,8-tetrachlor-dioxin (2,3,7,8-TCDD), has been a concern of both scientific researchers and the public for many years. The sheer mass of published information that has resulted from this concern has created difficulties in assessing the overall scope of the dioxin problem. In this report, the voluminous data on 2,3,7,8-TCDD and other dioxins are summarized and assembled in a manner that allows comparison of related observations from many sources; thus, the report serves as a comprehensive guide in evaluation of the environmental hazards of dioxins. Sections 2 and 3 present detailed information on the chemistry and sources of dioxins. Various routes of formation of dioxins are discussed, and the possible presence of dioxins in basic organic chemicals and pesticides is addressed. Section 4 details the development of an analytical method for detecting part-per-trillion levels of dioxins in industrial wastes. Sections 5 through 8 discuss routes of human exposure to dioxins, including accounts of public and occupational exposure, and the health effects, environmental degradation, transport, and disposal of dioxins.

Descriptors: Source assessment, Health assessment, Exposure assessment, Dioxins

PB82-152174 PC A09/MF A01
Industrial Surface Coating: Appliances - Background Information for Proposed Standards
EPA, Research Triangle Park, NC, OAQPS
Nov 80, 193p, EPA-450/3-80-037A

Abstract: See PB-202 459

Descriptors: NSPS, Coating operations

PB82-152851 PC A05/MF A01
A Review of Standards of Performance for New Stationary Sources - Coal Preparation Plants
EPA, Research Triangle Park, NC, OAQPS
TRW Energy Systems Group
Dec 80, 93p, EPA-450/3-80-022

Abstract: See PB-202 459

Descriptors: NSPS, Coal preparation plants

PB82-152869 PC A14/MF A01
Bulk Gasoline Terminals - Background Information for Proposed Standards
EPA, Research Triangle Park, NC, OAQPS
Dec 80, 323p, EPA-450/3-80-038A

Abstract: See PB-202 459

Descriptors: NSPS, Gasoline marketing, Bulk gasoline terminals

PB82-186792 PCA21/MF A01
Health Assessment Document for Polycyclic Organic Matter
EPA, Research Triangle Park, NC, ECAO
Syracuse University Research Corp.
J. Santodonato, et al.
Feb 79, 492p, EPA-600/9-79-008

The document responds to Section 122 of the Clean Air Act as Amended August 1977, which requires the Administrator to decide whether atmospheric emissions of polycyclic organic matter (POM) potentially endanger public health. This document reviews POM data on chemical and physical properties, atmospheric forms, atmospheric fate and transport, measurement techniques, ambient levels, toxicology, occupational health, and epidemiology. Polycyclic aromatic hydrocarbons (PAH's), such as the carcinogen benzo(a)pyrene (BaP), and their neutral nitrogen analogs are the two POM chemical groups occurring most frequently in ambient air. The major environmental sources of POM's appear to be the combustion or pyrolysis of materials containing carbon and hydrogen. There is general agreement that POM compounds are associated with suspended particulate matter from both mobile and stationary sources, principally respirable particles. Available monitoring data suggest that many POM compounds associated with particulate matter probably are stable in ambient air for several days. The major health concern over exposure to POM's is their carcinogenicity POM's gain ready access to the body's circulation either by inhalation, ingestion, or skin contact. Although it cannot be stated unequivocalty that any POM's are human carcinogens, several of these compounds are among the more potential animal carcinogens known.

Descriptors: Health assessment, Polycyclic organic matter, Combustion

PB82-196148 PC A04/MF A01
Feasibility of Developing Source Sampling Methods for Asbestos Emissions
EPA, Research Triangle Park, NC, ESRL
Battelle Columbus Labs
W. M. Henry, et al.
Apr 82, 70p, EPA-600/3-82-008

Abstract: The objective of this program was to determine the feasibility of developing methods for sampling asbestos in the emissions of major asbestos sources: (1) ore production and taconite production; (2) asbestos-cement production, (3) asbestos felt and paper production, and (4) the production of asbestos-containing friction materials. Potential sampling methods must provide samples compatible with the provisional analysis methods using electron microscopy (U.S. EPA Report No. 600/2-77-178). Two general criteria of source sampling methods were identified as: (1) the sampling method must be capable of collecting a representative sample and (2) the asbestos emissions must be collected in such a manner that they can be analyzed by the provisional analytical method. Concurrent investigations of potential emissions in the industries and of current knowledge of sampling fibers were undertaken to assess the feasibility of meeting the firt criterion. The industry survey revealed that asbestos emissions can be divided into two classes: stack and fugitive. With respect to the second criterion, it is not feasible to undertake a methods development program for strict compatibility with the recommended procedure of the provisional analytical method. However, methods development programs are feasible if the sampling method is to be compatible with the alternative procedures of the provisional method or general electron microscopy.

Descriptors: Source sampling/ambient monitoring methodology, Asbestos

PB82-200460 PC A03/MF A01
Phosphate Rock Plants - Background Information for Promulgated Standards
EPA, Research Triangle Park, NC, OAQPS
Apr 82, 48p, EPA-450/3-79-017B

Abstract: See PB-202 459

Descriptors: NSPS, Phosphate industry

PB82-202490 PC A04/MF A01
Lead-Acid Battery Manufacture - Background Information for Promulgated Standards
EPA, Research Triangle Park, NC, OAQPS
Nov 80, 59p, EPA-450/3-79-028B

Abstract: See PB-202 459

Descriptors: NSPS, Battery manufacturing

PB82-202573 * PC A24/MF A01
Fossil Fuel Fired Industrial Boilers - Background Information. Volume 1: Chapters 1-9
EPA, Research Triangle Park, NC, OAQPS
Mar 82, 553p, EPA-450/3-82-006A

Abstract: See PB-202 459

Descriptors: NSPS, Boilers, Combustion

PB82-202581 * PC A15/MF A01
Fossil Fuel Fired Industrial Boilers - Background Information. Volume 2: Appendices
EPA, Research Triangle Park, NC, OAQPS
Mar 82, 331p, EPA-450/3-82-006B

Abstract: See PB-202 459

Descriptors: NSPS, Boilers, Combustion

PB82-203209 * PC A99/MF A01
Nonfossil Fuel Fired Industrial Boilers: Background Information
EPA, Research Triangle Park, NC, OAQPS
Mar 82, 791p, EPA-450/3-82-007

Abstract: See PB-202 459

Descriptors: NSPS, Boilers

PB82-217126 PC A12/MF A01
Fugitive Emission Sources of Organic Compounds - Additional Information on Emissions, Emission Reductions, and Costs
EPA, Research Triangle Park, NC, OAQPS
Apr 82, 258p, EPA-450/3-82-010

Abstract: See PB-202 459

Descriptors: NSPS, Chemical industry, Fugitive emissions sources

PB82-227372 PC A03/MF A01
Carcinogen Assessment Group's Final Report on Population Risk to Ambient Benzene Exposures
EPA, Research Triangle Park, NC, OAQPS
R. E. Albert
Jan 79, 46p, EPA-450/5-80-004

This report is one of three reports which were prepared by Environmental Protection Agency to determine what regulatory action should be taken by EPA to control sources of atmospheric emissions of benzene. This report estimates from three epidemiological studies the leukemia risk associated with current general population exposures to benzene in the United States.

Descriptors: Exposure assessment, Benzene

PB82-231325 PC A05/MF A01
Technical Assistance in Support of Permitting Activities for the Thermal Destruction of PCBs
EPA, Research Triangle Park, NC, IERL
GCA Corp.
R.G. Mcinnes
Oct 81, 78p, EPA-600/2-81-240

The report describes phased efforts to identify, evaluate, and provide technical permitting assistance to utility boilers considering thermally destroying PCB-contaminated mineral oil. The project also required that State and Local Governments be provided information needed to air permitting of a PCB verification burn.

Descriptors: Source assessment, Boilers, Combustion, Hazardous waste disposal, Polychlorinated biphenyls (PCB)

PB82-234618 PC A03/MF A01
Sampling for High-Molecular-Weight Organic Compounds in Power Plant Stack Gases
EPA, Research Triangle Park, NC, ESRL
Southern Research Institute
W. R. Dickson, H. C. Miller, W. J. Barrett
May 82, 50p, EPA-600/7-82-039

The results of laboratory and field investigations of experimental sampling systems intended to collect high-molecular-weight organic compounds from flue gases in coal-fired power plants are presented. The most promising sampling device was a solid sorbent cartridge inserted directly into the flue gas stream and cooled to a temperature just above the dew point by a forced flow of external ambient air. Although certain sorbent materials were shown to be partially effective for the collection of vapors of polynuclear aromatic hydrocarbons at temperatures of 50 to 60C, no completely satisfactory sorbent was found. Ambersorb XE-340, a nonpoplar carbonaceous sorbent, was the most satisfactory of several organic and inorganic sorbent materials tried, but its usefulness was limited by the presence of contaminants that could not be removed. The simplicity of the sampling system and the results obtained suggest that continuing efforts should be made to find a better sorbent material.

Descriptors: Source sampling/ambient monitoring methodology, Organic compounds, Electric power plants

PB82-241860 PC A99/MF A01
PCB Disposal by Thermal Destruction
EPA, Dallas, TX, Region VI
Jun 81, 610p, EPA-906/9-82-003

A report on the sampling, analysis, and consideration of risks and benefits associated with the incineration of polychlorinated biphenyls (PCBs) at two commercial facilities in Deer Park, Texas and El Dorado, Arkansas. Included are a summary, PCB incineration test reports, polychlorinated dibenzo-p-dioxin (PCDD) and polychlorinated dibenzofuran (PCDF) emission sampling reports, a PCDD and PCDF analytical chemistry report, air dispersion modeling results, an analysis of risks and benefits, and letters and conditions of approval.

Descriptors: Source assessment, Incinerators, Combustion, Hazardous waste disposal, Polychlorinated biphenyls (PCB), Polychlorinated dibenzo-p-dioxin, Polychlorinated dibenzofuran

PB82-242256 PC A13/MF A01
Assessment of Human Exposures to Atmospheric Acrylonitrile
EPA, Research Triangle Park, NC, OAQPS
SRI International
B. E. Suta
Aug 79, 284p

This report is one in a series that SRI International is providing for the U.S. Environmental Protection Agency to estimate the population-at-risk to selected pollutants. Primarily, this study has sought to estimate environmental exposure of the U.S. population to atmospheric acrylonitrile (AN) emissions. The principal atmospheric sources considered in this report are facilities that produce or that use it as a chemical intermediate. Many tables are included.

Descriptors: Exposure assessment, Acrylonitrile, Chemical industry

PB82-242611 PC A04/MF A01
Primary Aluminum. Background Information: Proposed Amendments
EPA, Research Triangle Park, NC, OAQPS
Aug 78, 71p, EPA-450/2-78-025A

Abstract: See PB-202 459

Descriptors: NSPS, Aluminum industry, Metal industry

PB82-250234 PC A06/MF A01
Human Population Exposures to Coke-Oven Atmospheric Emissions
EPA, Research Triangle Park, NC, OAQPS
SRI International
A. P. Carlin, J. D. Cirvello
Oct 78, 123p

There is a substantial body of evidence, both direct and indirect, that the mixture that coke oven emissions represent is carcinogenic and toxic. Current U.S. Environmental Protection Agency (EPA) policy states that there is no zero risk level for carcinogens. To determine what regulatory action should be taken by EPA on atmospheric emissions of coke ovens, three reports have been prepared: (1) a health effects assessment, (2) a population exposure assessment and (3) a risk assessment document based on the data in the first two assessments. This document is the human population exposure assessment and presents estimates of the number of people in the general population of the United States exposed to atmospheric concentrations of coke ovens emissions. Estimates are provided of population exposures to ambient concentrations of benzo(a)pyrene (BaP) and benzene soluble organics (BSO) material caused by coke oven emissions. Illustrations and tables.

Descriptors: Exposure assessment, Coke ovens, Benzo(a)pyrene, Organic compounds

PB82-257726 PC A04/MF A01
Asphalt Roofing Manufacturing Industry - Background Information for Promulgated Standards
EPA, Research Triangle Park, NC, OAQPS
Jul 82, 68p, EPA-450/3-80-021B

Abstract: See PB-202 459

Descriptors: NSPS, Asphalt industry, Roofing

PB82-262189 PC A03/MF A01
Sampling Air for Gaseous Organic Chemicals Using Solid Adsorbents Applications to Tenax
EPA, Research Triangle Park, NC, EMSL
F. Walling, et al.
Aug 82, 38p, EPA-600/4-82-059

A simple input-output model for a two phase flow system with fixed bed was applied to Tenax adsorption of atmospheric contaminants. The model fit laboratory data acceptably and relationships with previous approaches were stated. Chromatographic retention volumes are used in this model which provides a means of scaling adsorbent bed dimensions and flow rates to preserve desired output characteristics. Suggestions are made about how to use the model for rational sampling design when quantitative information is needed. Practical limitations of field operations and fundamental knowledge and the need to evaluate every datum lead to practical suggestions for sampling. At least two samples collected simultaneously but at very different flow rates are suggested as necessary for quantitative work.

Descriptors: Source sampling/ambient monitoring methodology, Organic compounds

PB83-113563 PC A99/MF A01
Stationary Internal Combustion Engines. Standards Support and Environmental Impact Statement. Volume I: Proposed Standards of Performance
EPA, Research Triangle Park, NC, OAQPS
Jan 79, 786p, EPA-450/2-78-125A

Abstract: See PB-202 459

Descriptors: NSPS, Internal combustion engines, Engines

PB83-113746 PC A21/MF A01
Metallic Mineral Processing Plants - Background Information for Proposed Standards, Volume 1, Chapters 1-9
EPA, Research Triangle Park, NC, OAQPS
Aug 82, 488p, EPA-450/3-81-009A

Abstract: See PB-202 459

Descriptors: NSPS, Mineral industry, Metal industry

PB83-114280 * PC A15/MF A01
Metallic Mineral Processing Plants - Background Information for Proposed Standards. Volume 2: Appendices
EPA, Research Triangle Park, NC, OAQPS
Aug 82, 328p, EPA-450/3-81-009B

Abstract: See PB-202 459

Descriptors: NSPS, Metal industry, Mineral industry

PB83-118760 PC A03/MF A01
Method for Measuring Carbon Fiber Emissions from Stationary Sources
EPA, Research Triangle Park, NC, ESRL
Battelle Columbus Labs
W.M. Henry, C.M. Melton, E.W. Schmidt
Aug 82, 43p, EPA-600/3-82-080

Carbon fibers are highly conductive, lightweight and of small dimensions. When released as emissions from production, manufacturing, processing and disposal sources they may become airborne and disperse over wide areas. If they settle onto electronic or electrical components they can cause malfunctions and damage due to their high electrical conductivity. This research program was initiated to develop techniques to identify and measure carbon fiber concentrations emitted from manufacturing, processing, fabricating and incinerating sources. Its overall objective was to develop a measurement method useful to support possible emission regulatory actions. The method was tested on samples collected from various stationary emission sources and from a pilot-scale in-house incineration facility. The results of these emission measurements are reported.

Descriptors: Source sampling/ambient monitoring methodology, Carbon fibers

PB83-124867 PC A02/MF A01
Metal Coil Surface Coating Industry - Background Information for Promulgated Standards
EPA, Research Triangle Park, NC, OAQPS
Oct 82, 22p, EPA-450/3-80-035B

Abstract: See PB-202 459

Descriptors: NSPS, Coating operations, Metal industry

PB83-124941 PC A04/MF A01
Industrial Surface Coating: Large Appliances - Background Information for Promulgated Standards
EPA, Research Triangle Park, NC, OAQPS
Oct 82, 53p, EPA-450/3-80-037B

Abstract: See PB-202 459

Descriptors: NSPS, Coating operations

PB83-129569 PC A12/MF A01
Health Assessment Document for Carbon Tetrachloride
EPA, Cincinnati, OH, ECAO
Mar 82, 264p, EPA-600/8-82-001

The Office of Health and Environmental Assessment, in consultation with an Agency Work Group, has prepared assessment document based on the data in the first two assessments. This document is the human population exposure assessment and presents estimates of the number of people in the general population of the United States exposed to atmospheric concentrations of coke ovens emissions. Estimates are provided of population exposures to ambient concentrations of benzo(a)pyrene (BaP) and benzene soluble organics (BSO) material caused by coke oven emissions. Illustrations and tables.

Descriptors: Exposure assessment, Coke ovens, Benzo(a)pyrene, Organic compounds

PB82-257726 PC A04/MF A01
Asphalt Roofing Manufacturing Industry - Background Information for Promulgated Standards
EPA, Research Triangle Park, NC, OAQPS
Jul 82, 68p, EPA-450/3-80-021B

Abstract: See PB-202 459

Descriptors: NSPS, Asphalt industry, Roofing

PB82-262189 PC A03/MF A01
Sampling Air for Gaseous Organic Chemicals Using Solid Adsorbents Applications to Tenax
EPA, Research Triangle Park, NC, EMSL
F. Walling, et al.
Aug 82, 38p, EPA-600/4-82-059

A simple input-output model for a two phase flow system with fixed bed was applied to Tenax adsorption of atmospheric contaminants. The model fit laboratory data acceptably and relationships with previous approaches were stated. Chromatographic retention volumes are used in this model which provides a means of scaling adsorbent bed dimensions and flow rates to preserve desired output characteristics. Suggestions are made about how to use the model for rational sampling design when quantitative information is needed. Practical limitations of field operations and fundamental knowledge and the need to evaluate every datum lead to practical suggestions for sampling. At least two samples collected simultaneously but at very different flow rates are suggested as necessary for quantitative work.

Descriptors: Source sampling/ambient monitoring methodology, Organic compounds

PB83-113563 PC A99/MF A01
Stationary Internal Combustion Engines. Standards Support and Environmental Impact Statement. Volume I: Proposed Standards of Performance
EPA, Research Triangle Park, NC, OAQPS
Jan 79, 786p, EPA-450/2-78-125A

Abstract: See PB-202 459

Descriptors: NSPS, Internal combustion engines, Engines

PB83-113746 PC A21/MF A01
Metallic Mineral Processing Plants - Background Information for Proposed Standards, Volume 1, Chapters 1-9
EPA, Research Triangle Park, NC, OAQPS
Aug 82, 488p, EPA-450/3-81-009A

Abstract: See PB-202 459

Descriptors: NSPS, Mineral industry, Metal industry

PB83-114280 * PC A15/MF A01
Metallic Mineral Processing Plants - Background Information for Proposed Standards. Volume 2: Appendices
EPA, Research Triangle Park, NC, OAQPS
Aug 82, 328p, EPA-450/3-81-009B

Abstract: See PB-202 459

Descriptors: NSPS, Metal industry, Mineral industry

PB83-118760 PC A03/MF A01
Method for Measuring Carbon Fiber Emissions from Stationary Sources
EPA, Research Triangle Park, NC, ESRL
Battelle Columbus Labs
W.M. Henry, C.M. Melton, E.W. Schmidt
Aug 82, 43p, EPA-600/3-82-080

Carbon fibers are highly conductive, lightweight and of small dimensions. When released as emissions from production, manufacturing, processing and disposal sources they may become airborne and disperse over wide areas. If they settle onto electronic or electrical components they can cause malfunctions and damage due to their high electrical conductivity. This research program was initiated to develop techniques to identify and measure carbon fiber concentrations emitted from manufacturing, processing, fabricating and incinerating sources. Its overall objective was to develop a measurement method useful to support possible emission regulatory actions. The method was tested on samples collected from various stationary emission sources and from a pilot-scale in-house incineration facility. The results of these emission measurements are reported.

Descriptors: Source sampling/ambient monitoring methodology, Carbon fibers

PB83-124867 PC A02/MF A01
Metal Coil Surface Coating Industry - Background Information for Promulgated Standards
EPA, Research Triangle Park, NC, OAQPS
Oct 82, 22p, EPA-450/3-80-035B

Abstract: See PB-202 459

Descriptors: NSPS, Coating operations, Metal industry

PB83-124941 PC A04/MF A01
Industrial Surface Coating: Large Appliances - Background Information for Promulgated Standards
EPA, Research Triangle Park, NC, OAQPS
Oct 82, 53p, EPA-450/3-80-037B

Abstract: See PB-202 459

Descriptors: NSPS, Coating operations

PB83-129569 PC A12/MF A01
Health Assessment Document for Carbon Tetrachloride
EPA, Cincinnati, OH, ECAO
Mar 82, 264p, EPA-600/8-82-001

The Office of Health and Environmental Assessment, in consultation with an Agency Work Group, has prepared this Health Assessment on Carbon Tetrachloride to serve as a "Source Document" for Agency-wide use. Originally the health assessment was developed for use by the Office of Air Quality Planning and Standards; however, at the request of the Agency Work Group on Solvents, the assessment scope was expanded to address multimedia aspects. This assessment will help insure consistency in the Agency's consideration of the relevant scientific health data associated with carbon tetrachloride. In the development of the assessment document, the scientific literature has been inventoried, key studies have been evaluated and summary/conclusions have been prepared so that the chemical's toxicity and related characteristics are qualitatively identified. Observed effect levels and dose-response relationships are discussed, where appropriate, so that the nature of the adverse health responses are placed in perspective with observed environmental levels.

Descriptors: Health assessment, Carbon tetrachloride

PB83-136390 PC A03/MF A01
Surface Coating of Metal Furniture - Background Information for Promulgated Standards
EPA, Research Triangle Park, NC, OAQPS
Oct 82, 50p, EPA-450/3-80-007B

Abstract: See PB-202 459

Descriptors: NSPS, Coating operations, Furniture industry

PB83-139535 PC A04/MA A01
Development of a Tunable Zeeman Spectrometer for Analysis of Toxic Organic Compounds
EPA, Research Triangle Park, NC, EMSL
California Univ., Berkeley
T. Hadeishi, et al.
Nov 82, 62p, EPA-600/4-82-067

This program was undertaken to investigate the application of a new high resolution ultraviolet-visible absorption technique called tunable atomic line molecular spectroscopy (TALMS) to the detection of a variety of volatile organic molecules of concern to the Environmental Protection Agency. During the first phase of the study a prototype instrument was built and tested to demonstrate the detection of both small (i.e., less than four atoms) and complex molecules. During the second phase a more compact instrument was constructed for delivery to EPA, Research Triangle Park, NC before January, 1982. This second instrument was optimized for the detection of the more complex organic molecules benzene and chlorobenzene.

Descriptors: Source sampling/ambient monitoring methodology, Organic compounds, Benzene, Chlorobenzenes

PB83-142612 PC A03/MF A01
Publication Rotogravure Printing - Background Information for Promulgated Standards
EPA, Research Triangle Park, NC, OAQPS
Oct 82, 46p, EPA-450/3-80-031B

Abstract: See PB-202 459

Descriptors: NSPS, Printing

PB83-153015 PC A16/MF A01
Synthetic Fiber Production Facilities - Background Information for Proposed Standards
EPA, Research Triangle Park, NC, OAQPS
Oct 82, 375p, EPA-450/3-82-011A

Abstract: See PB-202 459

Descriptors: NSPS, Textile industry

PB83-153528 PC A14/MF A01
Preliminary Study of Sources of Inorganic Arsenic
EPA, Research Triangle Park, NC, OAQPS
Radian Corp.
A.J. Miles, G.W. Brooks, L.E. Keller
Aug 82, 322p, EPA-450/5-82-005

The purpose of this study was to analyze the severity of inorganic arsenic emissions from seven source categories including primary copper, lead, and zinc smelting, cotton ginning, glass manufacturing, and arsenic chemical manufacturing. The magnitude of arsenic emissions from each source category were quantified and control systems were investigated to determine baseline and estimated best control (EBC) for arsenic. The environmental, energy, and economic costs of implementing EBC, in source categories where it is not being used, were estimated. Two source categories, primary lead smelting and arsenic chemical manufacturing, were determined to have EBC in place as a result of compliance with existing regulations. The number of people exposed to arsenic from each of the source categories will be assessed separately by EPA using emissions and stack data generated in this study. The physical and chemical characteristics of arsenic and their impact on the control of arsenic emissions from the source categories were also examined.

Descriptors: NESHAP, Source assessment, Arsenic (inorganic), Smelters, Lead smelters, Copper smelters, Zinc smelters, Cotton gins, Glass industry, Chemical industry

PB83-156935 PC A05/MF A01
Measurements of Hazardous Organic Chemicals in the Ambient Atmosphere
EPA, Research Triangle Park, NC, ESRL
SRI International
H.B. Singh, et al.
Jan 83, 99p, EPA-600/3-83-002

Analytical methods were refined and applied to the ambient analysis of 44 organic chemicals, many of which are bacterial mutagens or suspected carcinogens. On-site field collection programs, based on single site studies of 9 to 11 days duration each, were conducted in 10 U.S. cities. Field studies were performed with an instrumented mobile laboratory. A round-the-clock measurement schedule was followed at all sites. The field measurements allowed a determination of atmospheric concentrations, variabilities, and mean diurnal behaviors of the chemicals. The data analyzed relative to theoretically estimated removal rates. Typical diurnal profiles show highest concentrations of the primary pollutants during night time or early morning hours, with minimum concentrations in the afternoon hours. Chemistry plays only a nominal role in defining this diurnal behavior in most cases. Except for aromatic hydrocarbons and aldehydes, average concentrations of the measured species were in the 0- to 5-ppb range. The average concentration range observed for aromatics and aldehydes was 0- to 20-ppb.

Descriptors: Technical monitoring document, Organic compounds

PB83-157743 PC A13/MF A01
VOC (Volatile Organic Compounds) Fugitive Emissions in Petroleum Refining Industry - Background Information for Proposed Standards
EPA, Research Triangle Park, NC, OAQPS
Nov 82, 282p, EPA-450/3-81-015A

Abstract: See PB-202 459

Descriptors: NSPS, Petroleum refineries, Fugitive emissions sources

PB83-163543 PC A15/MF A01
Rubber Tire Manufacturing Industry - Background Information for Proposed Standards
EPA, Research Triangle Park, NC, OAQPS
Jul 81, 339p, EPA-450/3-81-008A

Abstract: See PB-202 459

Descriptors: NSPS, Rubber industry, Tire manufacturing

PB83-166488 PC A17/MF A01
Revised Standards for Basic Oxygen Process Furnaces: Background Information for Proposed Standards
EPA, Research Triangle Park, NC, OAQPS
Dec 82, 381p, EPA-450/3-82-005A

Abstract: See PB-202 459

Descriptors: NSPS, Iron and steel industry, Basic oxygen process furnaces

PB83-169136 PC A12/MF A01
Flexible Vinyl Coating and Printing Operations - Background Information for Proposed Standards
EPA, Research Triangle Park, NC, OAQPS
Jan 83, 273p, EPA-450/3-81-016A

Abstract: See PB-202 459

Descriptors: NSPS, Coating operations, Printing

PB83-177659 PC A04/MF A01
Methods for Assessing Exposure to Windblown Particulates
EPA, Washington, D.C., ORD
Dynamac Corp.
Mar 83., 65p, EPA-600/4-83-007

This report reviews and evaluates methods for estimating airborne concentrations of particulates originating from waste disposal sites or similar areas over which toxic materials have been intentionally or inadvertently deposited. The purpose of the work is to identify a model (or models) that can be used to estimate human exposures to windblown toxic particulates from contaminated areas. If subsequent use of these preliminary models indicates serious exposure can occur to toxic particulates from hazardous waste sites, then emission rate measurements from toxic waste disposal sites are recommended for the development of more accurate airborne particulate models.

Descriptors: Exposure assessment, Hazardous waste disposal

PB83-187468 PC A06/MF A01
User's Guide for the Automated Inhalation Exposure Methodology (IEM).
EPA, Cincinnati, OH, IERL
Oak Ridge National Lab
F.R. O'Donnell, et al.
Apr 83, 115p, EPA-600/2-83-029

The Inhalation Exposure Methodology (IEM) is a system of computer programs that estimates atmospheric transport of and population exposure to airborne pollutants. This paper discusses the capabilities of IEM and gives detailed instructions for executing the automated, interactive version of IEM that is installed on the IBM system at the National Computer Center, Research Triangle Park, North Carolina. This version uses eight execute (EXEC) programs to assist the user in preparing needed input data files, to direct the flow of input and output data, and to submit the computer programs for execution. Wind speed and direction data contained in Stability Array (STAR) meteorological data files are accessed, prepared, and input to the Industrial Source Complex, Long Term (ISCLT) Disperson Model. This model is then employed to calculate annual-average ground-level air concentrations of pollutants at specified points. These concentrations and site-specific population data are combined by the Concentration-Exposure Program (CONEX) to provide estimates of population exposures to pollutants. All steps required to execute the interactive version of IEM are explained and demonstrated with the aid of a sample problem.

Descriptors: Exposure assessment

PB83-191403 PC A11/MF A01
Volatile Organic Compounds in the Ambient Atmosphere of the New Jersey, New York Area
EPA, Research Triangle Park, NC, ESRL
New Jersey Inst. of Tech, Newark
J.W. Bozzelli, B.B. Kebbekus
Apr 83, 249p, EPA-600/3-83-022

From 1979 through 1981 data were collected on selected volatile organics in the ambient atmosphere of New Jersey and New York. The sites selected included urban, suburban rural, and industrial areas: Newark, Rutherford, South Amboy, Elizabeth, Camden and Batsto Village in New Jersey. In addition, studies were carried out on the sample trapping methodology, as well as on the correlation of the data obtained with wind direction during sampling. Generally, the aromatic compounds, especially benzene, toluene and p-xylene were the most common pollutants found and were usually the most concentrated of the species determined. Levels were usually in the low parts per billion range.

Descriptors: Technical monitoring document, Benzene, Toluene, p-Xylene, Organic compounds

PB83-192385 PC A17/MF A01
Background Information Document Proposed Standards for Radionuclides
EPA, Washington, DC, ORP
Mar 83, 390p, EPA-520/1-83-001

This report presents background information that supports the Environmental Protection Agency's (EPA's) proposed emission standards for radionuclides pursuant to Section 112 of the Clean Air Act. An analysis of public health impacts from the following source categories is presented: (1) Department of Energy (DOE) facilities, (2) Nuclear Regulatory Commission (NRC)-licensed and non-DOE Federal facilities, (3) coal-fired utility and industrial boilers, (4) uranium mines, (5) phosphate industry facilities, and (6) mineral extraction industry facilities. For each source category, the following information is presented: (1) a general description of the source category, (2) a brief description of the processes that lead to the emission of radionuclides into air, (3) a summary of emissions data, and (4) estimates of radiation doses and health risks to both individuals and populations.

Descriptors: NESHAP, Radioactive contaminants, Electric power plants, Boilers, Mining, Combustion, Phosphate industry, Mineral industry

PB83-195503 PC A10/MF A01
Volatile Organic Chemicals in the Atmosphere: An Assessment of Available Data
EPA, Research Triangle Park, NC, ESRL
SRI International
R. Brodzinsky, H.B. Singh
Apr 83, 207p, EPA-600/3-83-027A
For system on magnetic tape, see PB83-195511

Significant quantities of organic chemicals are released into the ambient environment as a necessary outcome of day-to-day human activities. In recent years, it has become evident that many of these chemicals are toxic at concentrations significantly higher than those found in the ambient atmosphere. The present study is designed to focus on the abundance of gaseous organic chemicals in the ambient environment with special emphasis on those that are or may be hazardous. The term "hazardous organic chemicals" (HOCs) used here is not intended to imply that a proven human health hazard exists. In most cases toxicity studies are incomplete and entail extrapolation of animal data to humans. Over the years many studies have been conducted to characterize the concentrations of a wide range of potentially hazardous gaseous organic chemicals. This study, for the U.S. Environmental Protection Agency (EPA), was an attempt to study their usefulness and to integrate them into a useful and cohesive document with a single, coherent data base that would readily indicate: Trace chemicals measured, Locations and times of HOC measurements, Typical concentrations of the individual HOCs, and Data quality and representativeness.

Descriptors: Technical monitoring document, Organic compounds

PB83-195511 PC (Data tape. Contact NTIS for price)
Volatile Organic Chemicals in the Atmosphere: An Assessment of Available Data
EPA, Research Triangle Park, NC, ESRL
R. Brodzinsky, H. B. Singh
Mar 83, Mag tape, EPA 600/3-83-027B

Source tape is in ASCII character set. Character set restricts preparation to 9 track, one-half inch tape only. Identify recording mode by specifying density only. Call NTIS Computer Products if you have questions.

Abstract: See PB83-195503

Descriptors: Technical monitoring document, Organic compounds

PB83-196154 PC A08/MF A01
Ambient Acrylonitrile Levels Near Major Acrylonitrile Production and Use Facilities
EPA, Research Triangle Park, NC, EMSL
PEDCO-Environmental, Inc.
S. J. Howie, E. W. Koesters
Apr 83, 154p, EPA-600/4-83-016

In this study, ambient acrylonitrile (AN) levels were measured in the vicinity of two major AN user facilities and two major AN production facilities. Approximately 100 duplicate air samples were collected on charcoal sorption tubes at different locations at or beyond the fenceline of each plant and analyzed by gas chromatography. The data obtained showed a definite presence of AN downwind of each plant. The levels found, which varied from a high of 130 parts per billion (ppb) to trace amounts (below 2.5 ppb) varied considerably depending on the date, the sample location, and the plant tested. The data shows higher levels of AN near use facilities than near production facilities, but factors such as distance from potential AN sources to sampling points may have influenced the results.

Descriptors: Source sampling/ambient monitoring methodology, Acrylonitrile, Acrylonitrile plants, Chemical industry

PB83-199190 PC A11/MF A01
Industrial Process Profiles for Environmental Use: Chapter 30. The Electronic Component Manufacturing Industry
EPA, Cincinnati, OH, IERL
PEDCo-Environmental, Inc.
Apr 83, 235p, EPA-600/2-83-033

Abstract: See PB-266 224

Descriptors: Source assessment, Electrical equipment industry, Microelectronics industry

PB83-212043 PC A06/MF A01
Ohio River Valley Study. Sites, Methods, Data Summary for 1980, Volume 1. Main Report
EPA, Research Triangle Park, NC, ESRL
Mead Technology Labs.
R. W. Shaw, R. J. Paur, T. Royal
May 83, 104p, EPA-600/3-83-044A

The Ohio River Valley Study was initiated to gather air quality data at sites representative of regional conditions in an area where current coal usage and projected increases are exceptionally large. These data were intended for use in developing source apportionment calculations to attempt to identify species contributing to fine and coarse particle mass and to identify the major pollution sources responsible for these ambient particles. Special emphasis was also directed to chemical and physical analysis of the aerosols and gases to estimate the impact of emissions from coal-fired power plants on air quality at these Ohio River Valley monitoring sites. This report describes procedures for site location and for station preparation, operation, and periodic audits. Data summaries are presented for the period May through December 1980.

Descriptors: Technical monitoring document, Source sampling/ambient monitoring methodology, Electric power plants

PB83-212050 PC A16/MF A01
Ohio River Valley Study. Sites, Methods, Data Summary for 1980. Volume 2. Appendices
EPA, Research Triangle Park, NC, ESRL
Mead Technology Labs
R. W. Shaw, R. J. Paur, T. Royal
May 83, 361p, EPA-600/3-83-044B

The Ohio River Valley Study was initiated to gather air quality data at sites representative of regional conditions in an area where current coal usage and projected increases are exceptionally large. This report describes procedures for site location and for station preparation, operation, and periodic audits. Data summaries are presented for the period May through December 1980. Measurements included atmospheric concentrations of nitrogen oxides, sulfur dioxide, ozone, and peroxyacetyl nitrate; local meteorology; aerosol mass and composition; total suspended particulate; and precipitation. Special analysis for speciation of sulfur and aerosols began in December 1980. Measurements of nitric acid and ammonia were made during the summer of 1981; results will be presented in a subsequent report.

Descriptors: Technical monitoring document, Source sampling/ambient monitoring methodology, Sulfur compounds, Aerosols, Nitrogen compounds, Electric power plants

PB83-213827 PC A09/MF A01
Health Assessment Document for Nickel. External Review Draft
EPA, Research Triangle Park, NC, ECAO
P. Mushak, et al.
May 83, 178p, EPA-600/8-83-012A

This document summarizes current scientific information regarding the effects of nickel on humans and the environment. The observed effects, as presented herein, consitutue the health basis from which the U.S. Environmental Protection Agency will make determinations regarding the possible listing and regulating of nickel as a hazardous air pollutant under the Clean Air Act. Specifically, this document discusses the following topics--physical and chemical properties of nickel; environmental distribution and cycling; nickel metabolism, toxicology and essentiality--and identifies the factors most germane to assessing quantitative human health risks.

Descriptors: Health assessment, Nickel

PB83-214551 PC A04/MF A01
Field Validation of EPA (Environmental Protection Agency) Reference Method 23
EPA, Research Triangle Park, NC, EMSL
Scott Environmental Technology, Inc.
B. Bradd
Jun 83, 53p, EPA-600/4-83-024

The accuracy and precision of U.S. Environmental Protection Agency Reference Method 23 was evaulated at a trichloroethylene degreasing facility and an ethylene dichloride plant. The method consists of a procedure for obtaining an integrated sample followed by gas chromatographic analysis. This study identified a number of conditions such as sunlight and sample volume that may affect the performance of the Method. A paired sampling technique was employed to obtain identical samples, from which the precision and variable interactions could be determined. Certain results fell outside the range of acceptable precision, especially when mylar bags were employed. Modifications to the method are suggested that specify that only Tedlar bags be used for sampling, that incorporate an on-site technique for leak detection, and that discontinue the procedure for moisture removal. With these modifications, Reference Method 23 was fully validated as acceptable for field use.

Descriptors: Source sampling/ambient monitoring methodology, Trichloroethylene, Ethylene dichloride, Organic compounds, Degreasing operations, Ethylene dichloride plants, Chemical industry

PB83-215657 PC A05/MF A01
Hazardous Air Pollutant Prioritization System (HAPPS)
EPA, Research Triangle Park, NC, OAQPS
Argonne National Lab
A. E. Smith, D. J. Fingleton
Oct 82, 99p, EPA-450/5-82-008

This report presents a preliminary screening technology by which a large number of potentially hazardous compounds can be numerically ranked using readily available information on health effects and release to the ambient air. Factors considered are oncongenicity, mutagenicity, reproduction and developmental toxicity, acute lethality, effects other than acute lethality, production volume, vapor pressure, bioaccumulation and existing standards.

Descriptors: Exposure assessment, Health assessment

PB83-232280 PC A08/MF A01
Updated Mutagenicity and Carcinogenicity Assessment of Cadmium: Addendum to the Health Assessment Document for Cadmium (May 1981)
EPA, Washington, D.C., OHEA
L. D. Anderson, et al.
Jun 83, 151p, EPA-600/8-81-023

This draft document evaluates the mutagenicity and carcinogenicity of cadmium, supplementing an earlier document (Health Assessment Document for Cadmium, May 1981) which dealth with all health effects. Since the earlier document was prepared, a rate inhalation carcinogenicity study has been reported and several epidemiology and mutagenicity papers have been published. This draft document tentatively concludes that: (1) there is evidence suggesting that cadmium and certain cadmium compounds are weakly mutagenic; (2) cadmium chloride aerosol induces lung cancer in rats; (3) injected cadmium salts induce injection site sarcomas and testicular tumors in both mice and rats; (4) there is limited epidemiologic evidence that inhaled cadmium induces prostate and and/or lung caner in highly exposed workers; (5) there is no evidence that cadmium is carcinogenic via ingestion, which is a major route of human exposure, and the upper-limit of potency via ingestion is at least 200 times less than via inhalation.

Descriptors: Health assessment, Cadmium

PB83-234120 PC A18/MF A01
Inorganic Arsenic Emissions from High-Arsenic Primary Copper Smelters - Background Information for Proposed Standards
EPA, Research Triangle Park, NC, OAQPS
Apr 83, 402p, EPA-450/3-83-009A

Standards of performance to control emissions of inorganic arsenic from new and existing primary copper smelters processing feed materials containing an annual average of 0.7 percent or greater arsenic are being proposed under Section 112 of the Clean Air Act. This document provides information on the background and authority, regulatory alternatives considered, and environmental and economic impacts of the regulatory alternatives.

Descriptors: NESHAP, Arsenic (inorganic), Copper smelters, Smelters

PB83-234138 PC A21/MF A01
Inorganic Arsenic Emissions from Low-Arsenic Primary Copper Smelters - Background Information for Proposed Standards
EPA, Research Triangle Park, NC, OAQPS
Apr 83, 490p, EPA-450/3-83-010A

Standards of performance to control emissions of inorganic arsenic from new and existing primary copper smelters processing feed materials containing an annual average of less than 0.7 percent arsenic are being proposed under Section 112 of the Clean Air Act. This document provides information on the background and authority, regulatory alternatives considered, environmental and economic impacts of the regulatory alteratives.

Descriptors: NESHAP, Arsenic (inorganic), Copper smelters, Smelters

PB83-239020 PC A07/MF A01
Technical Assistance Document for Sampling and Analysis of Toxic Organic Compounds in Ambient Air
EPA, Research Triangle Park, NC, EMSL
Battelle Columbus Labs.
R. M. Riggan
Jun 83, 134p, EPA-600/4-83-027

This project had as an objective the development of a Technical Assistance Document (TAD) for sampling and analysis of toxic organic compounds in ambient air. The primary users of this document are expected to be regional, state, and local environmental protection personnel who are faced with the need to determine ambient air quality for regulatory or information gathering purposes. The TAD consists of the following four sections: Introduction, Regulatory Issues Related to Toxic Organic Monitoring, Guidelines for Development of a Monitoring Plan, and Sampling and Analysis State of the Art. A topical index is included to assist the reader in locating the pertinent subject areas within the document.

Descriptors: Source sampling/ambient monitoring methodology, Organic compounds

PB83-256206 PC A09/MF A01
Bulk Gasoline Terminals: Background Information for Promulgated Standards
EPA, Research Triangle Park, NC, OAQPS
Aug 83, 186p, EPA-450/3-80-038B

Abstract: See PB-202 459

Descriptors: NSPS, Gasoline marketing, Bulk gasoline terminals

PB83-258103 PC A21/MF A01
Draft Environmental Impact Statement. Nonmetallic Mineral Processing Plants: Background Information for Proposed Standards
EPA, Research Triangle Park, NC, OAQPS
Apr 83, 485p, EPA-450/3-83-001A

Abstract: See PB-202 459

Descriptors: NSPS, Nonmetallic mineral industry, Mineral industry

PB83-259713 * PC A04/MF A01
Preliminary Environmental Assessment on Formcoke Cokemaking Process
EPA, Research Triangle Park, NC, IERL
Research Triangle Institute
D. W. Coy, C. C. Allen, B. H. Carpenter
Aug 83, 70p, EPA-600/7-83-046

The report gives results of a preliminary environmental evaluation and assessment of formcoking. The work is based on readily available literature sources, a plant visit, formcoke plant proposal and feasibility study data, and discussions with engineers and operators involved with formcoking. Material balances, calculations, and engineering judgment were used to convert existing data and information into a form that can be used to compare environmental discharges between formcoking and conventional by-product coking. Comparison results are presented. The lack of environmental data on formcoking is noted.

Descriptors: Source assessment, Combustion, Coke ovens

PB83-262063 * PC A12/MF A01
Multimedia Environmental Assessment of Electric Submerged Arc Furnaces Producing Ferroalloys
EPA, Research Triangle Park, NC, IERL
Research Triangle Institute
C. W. Westbrook
Sep 83, 265p, EPA-600/2-83-092

The report gives results of sampling and analysis at five ferroalloy plants to determine the amounts of particulates and organics generated during manufacture of several products, the effect of furnace type on the amounts generated, and the amounts of these materials escaping to the environment. Samples were also taken of the influent to and effluent from two plant wastewater treatment systems and groundwater samples around the waste disposal area of one plant. More organics are emitted to the atmosphere than particulates. Open furnaces emit as much as or more organics to the atmosphere than do semi-enclosed furnaces (kg/MW-hr basis).

Descriptors: Source assessment, Organic compounds, Combustion, Electric arc furnaces, Iron and steel industry

PB83-265249 PC A99/MF A01
Human Exposure to Atmospheric Concentrations of Selected Chemicals. Volume 2
EPA, Research Triangle Park, NC, OAQPS
Systems Applications, Inc.
G. E. Anderson
Sep 83, 737p

Abstract: See PB84-102540

Descriptors: Exposure assessment, Organic compounds, Chemical industry

PB84-100056 PC A19/MF A01
Health Assessment Document for Toluene
EPA, Research Triangle Park, NC, ECAO
Syracuse Research Corp.
Aug 83, 427p, EPA-600/8-82-008F

The health effect of primary concern with regard to exposures of humans to toluene is dysfunction of the central nervous system (CNS). Occupational exposures in the range of 200 to 1,500 ppm have elicited dose-related CNS alternations. Although myelotoxicity was previously attributed to toluene, recent evidence indicated that toluene is not toxic to the blood or bone marrow; myelotoxic effects are considered to have been the result of concurrent exposure to benzene. Available evidence is inadequate for assessing the carcinogenic potential of toluene. Although a 24-month inhalation exposure of rates to 300 ppm did not produce any positive carcinogenic effects, various design deficiencies precluded the usefulness of this study in assessing carcinogenic potential. Toluene has been shown to be non-mutagenic in a battery of microbial, mammalian cell, and whole organism test systems. Animal exposure studies suggest that toluene has low teratogenic potential. However, embryotoxicity has been shown to be an endpoint of concern. The reproductive effects of—toluene is a category recommended for additional research. Based on available exposure estimates, the only group at possible high risk are workers exposed at or near the threshold limit value (100 ppm).

Descriptors: Health assessment, Toluene

PB84-101898 * PC A06/MF A01
Review of New Source Performance Standards for Petroleum Refinery Claus Sulfur Recovery Plants
EPA, Research Triangle Park, NC, OAQPS
Aug 83, 125p, EPA-450/3-83-014

Abstract: See PB-202 459

Descriptors: NSPS, Sulfur compounds, Sulfur recovery plants, Petroleum refineries

PB84-102540 PC A11/MF A01
Human Exposure to Atmospheric Concentrations of Selected Chemicals. Volume 1
EPA, Research Triangle Park, NC, OAQPS
Systems Applications, Inc.
G. E. Anderson
Sep 83, 230p

EPA commissioned Systems Applications, Inc. (SAI) to estimate, on a nationwide basis, public exposure to atmospheric concentrations of some forty chemicals. The purpose of the study was to provide EPA with information that would be helpful for determining which of the chemicals to study in more detail and in what order. The emphasis was on estimates that would support rough relative comparisons among the chemicals. There was no intent to define, by a scientifically defensible methodology, actual public exposure and actual ambient air concentrations; the purpose did not warrant the very heavy expenditure of funds that would be needed to carry out such a project. The study made free use of such techniques as algorithms for estimating emissions rather than actual emissions data, constructed plant locations rather than actual plant locations, simplified dispersion modeling to estimate ambient air concentrations, and a constructed 'population' file that relied on extrapolation of 1970 Bureau of Census data on where people lived.

Descriptors: Exposure assessment, Organic compounds, Chemical industry

PB84-105311 * PC A21/MF A01
VOC Fugitive Emissions in Synthetic Organic Chemicals Manufacturing Industry - Background Information for Promulgated Standards
EPA, Research Triangle Park, NC, OAQPS
Feb 83, 482p, EPA-450/3-80-033b

Abstract: See PB-202 459

Descriptors: NSPS, Organic compounds, Chemical industry

PB84-110535 * PC A14/MF A01
Air Quality Data for Metals 1977 through 1979 from the National Air Surveillance Networks
EPA, Research Triangle Park, EMSL
E. G. Evans, et al.
Oct 83, 309p, EPA-600/4-83-053

The National Air Surveillance Network, which has existed for over 20 years, provides air quality information for many urban and nonurban locations within the United States. The data in this publication were collected with the generous support of the many state and local air pollution control agencies that operate the National Air Surveillance Network stations. Also, the ten EPA Regional Offices have participated in this program since 1973 by sending weighted high volume filters to the centralized laboratory for analysis. This report summarizes the network data for metals determined from high volume samples collected from 1977 through 1979. Concentration values are presented in the form of cumulative frequency distributions. Arithmetic and geometric sample statistics are also reported, as are measures of the precision associated with the analytical methods employed. This report is a continuation in a series of publications of network data.

Descriptors: Technical monitoring document, Metals

PB84-114354 PC A12/MF A01
Vinyl Chloride: A Review of National Emission Standards
EPA, Research Triangle Park, NC, OAQPS
TRW, Inc.
Feb 82, 266p, EPA-450/3-82-003

This VC NESHAP Review Study assesses the current VC regulation through an investigation of emission control techniques and technological developments in the industry. The study encompasses evaluations of existing and new control technologies, sources not regulated by the standard, and enforcement and compliance experience since promulgation of the standard. Information and data evaluated during this study were obtained through literature searches, plant visits, and interviews with industrial representatives and EPA Regional Office personnel. The results of this review study will form the basis for possible revision of the existing standard.

Descriptors: NESHAP, Vinyl chloride, Chemical industry, Ethylene dichloride/vinyl chloride plants, Polyvinyl chloride plants

PB84-114834 PC A23/MF A01
Air Oxidation Processes in Synthetic Organic Chemical Manufacturing Industry - Background Information for Proposed Standards
EPA, Research Triangle Park, NC, OAQPS
Oct 83, 547p, EPA-450/3-82-001A

Abstract: See PB-202 459

Descriptors: NSPS, Chemical industry, Air oxidation processes

PB84-114859 PC A04/MF A01
Beverage Can Surface Coating Industry--Background Information for Promulgated Standards of Performance
EPA, Research Triangle Park, NC, OAQPS
Aug 83, 53p, EPA-450/3-80-036B

Abstract: See PB-202 459

Descriptors: NSPS, Coating operations, Can manufacturing

PB84-116045 PC A13/MF A01
Petroleum Dry Cleaners - Background Information for Proposed Standards
EPA, Research Triangle Park, NC, OAQPS
Nov 82, 282p, EPA-450/3-82-012A

Abstract: See PB-202 459

Descriptors: NSPS, Dry cleaning

PB84-116748 PC A03/MF A01
Pressure Sensitive Tape and Label Surface Coating Industry - Background Information for Promulgated Standards
EPA, Research Triangle Park, NC, OAQPS
Sep 83, 38p, EPA-450/3-80-003B

Abstract: See PB-202 459

Descriptors: NSPS, Coating operations, Adhesives industry

PB84-118843 PC A06/MFA01
Health Assessment Document for 1,1,2-Trichloro-1,2,2-Trifluoroethane (Chlorofluorocarbon CFC-113)
EPA, Research Triangle Park, NC, OHEA
R. Carchman, M. Greenberg
Sep 83, 100p, EPA 600/8-82-002

Chlorofluorocarbon 113 (1,1,2-trichloro-1,2,2-trifluoroethane) has little potential to cause direct adverse health effects at levels found or expected in the general environment (<4.2 ppb). Experimental data do not indicate adverse health effects in humans at a TLV of 1,000 ppm. At exposure levels greatly exceeding 1,000 ppm, impairment of neurological and cognitive functions (humans) and detrimental cardiovascular effects (animals) have been observed.

Descriptors: Health assessment, 1,1,2-Trichloro-1,2,2-Trifluoroethane, Chlorofluorocarbon 113

PB84-120328 * PC A12/MF A01
Emission Characterization of Major Fossil Fuel Power Plants in the Ohio River Valley
EPA, Research Triangle Park, NC, ESRL
PEDCo-Environmental, Inc.
G. Baker, et al.
Nov 83, 258p, EPA-600/3-83-109

This study characterizes the atmospheric emissions from five major coal-fired power plant units in the Ohio River Valley between Portsmouth, Ohio, and Louisville, Kentucky. This characterization provides data that are representative of the boiler fuel emission control combinations of the current power plant population as well as those scheduled to go on line before the end of 1983. The Environmental Protection Agency will use this data to determine the impact of existing and planned power plants on air quality in this river valley.

Descriptors: Technical monitoring document, Electric power plants

PB84-120641 PC A18/MF A01
Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels in the Steel Industry--Background Information for Proposed Revisions to Standards
EPA, Research Triangle Park, NC, OAQPS
Jul 83, 412p, EPA-450/3-82-020A

Abstract: See PB-202 459

Descriptors: NSPS, Iron and steel industry, Electric arc furnaces

PB84-122910 * PC A06/MF A01
Exhaust Emissions from a Diesel Engine
EPA, Research Triangle Park, NC, ESRL
Johns Hopkins Univ.
T. H. Risby
Nov 83, 113p, EPA-600/3-83-106

Studies were performed using (1) Diesel particles collected from the undiluted exhaust of a single-cylinder engine, operated at constant speed and load, using a binary pure hydrocarbon fuel with air or gas mixture oxiders, and (2) Diesel particles collected from the diluted exhaust of a multicylinder engine operated on a commercial fuel. The physicochemical properties of the particles were determined by static and dynamic methods. The organic adsorbate was characterized by chromatographic and mass spectrometric procedures and by microbial testing protocols. Electron paramagnetic personance spectrometry and high performance liquid chromatography were used to study reactivity of the organic adsorbates. The particles collected from the exhaust of Diesel engines operated on binary pure hydrocarbons and on commercial fuels contained similar compounds in the organic adsorbates. The nitrogen in these compounds is derived mainly from the oxidizer (Air). The microbial mutagenic activities of the organic adsorbates found on the surface of both types of Diesel particles are comparable. These microbial mutagenic activities can be attributed mainly to the presence of nitrated polynuclear aromatic hydrocarbons.

Descriptors: Source assessment, Engines, Organic compounds, Polynuclear aromatic hydrocarbons

PB84-126762 PC A17/MF A01
Health Assessment Document for Vinylidene Chloride.
External Review Draft
EPA, Research Triangle Park, ECAO
Syracuse Research Corp.
D.K. Basu, et al.
Oct 83, 384p, EPA-600/8-83-031A

Vinylidene chloride is a highly reactive, flammable, clear colorless liquid. In the absence of chemical inhibitors, it can produce violently explosive, complex peroxides. The estimated, ambient air level of vinylidene chloride in urban-suburban areas of the United States is 20ng/m^3. The median concentration (14 ug/m^3) for ambient air at point sources of emission is substantially higher. Following oral or inhalation exposure, mammals readily absorb vinylidene chloride. Metabolities of vinylidene chloride, formed in the liver, produce toxic lesions in the liver and kidneys (the target organs), with inhibitors of metabolism providing protection from vinylidene chloride toxicity. The acute hepatotoxicity of vinylidene chloride is greater than that of any other chloroethylene. Vinylidene chloride is a mutagen in the Ames assay in the presence of a metabolic activation system. Kidney tumors, produced in male Swiss mice, appear to be a strain-specific response and may be produced by a non-specific mechanism as a result of severe kidney toxicity and accompanying compensatory growth. Applying the International Agency for Research in Cancer's (IARC's) criteria for animal studies, the evidence currently available suggesting the carcinogenicity of vinylidene chloride is limited and insufficient to determine its human carcinogenic potential.

Descriptors: Health assessment, Vinylidene chloride

PB84-128032 * PC A08/MF A01
Mini-Assessment: Total Exposure Assessment and Exposure-Dose Relationships
EPA, Washington, DC, OER
ICF, Inc.
W. M. Mendez, Jr., K. B. Kolsky, M. C. Gibbs
Dec 83, 158p, EPA-600/6-84-002

This report provides a brief examination of recent (1) research in the areas of total exposure assessment and (2) research concerning the relationship between patterns of exposure to environmental pollutants and dose levels received by exposed individuals and populations. This assessment is intended to provide policy makers with a brief, concise discussion of important trends in recent research; it is not meant to be a comprehensive literature review.

Descriptors: Exposure assessment, Health assessment

PB84-126669 PC A10/MF A01
Health Assessment Document for Epichlorohydrin.
External Review Draft
EPA, Research Triangle Park, NC, ECAO
Dynamac Corporation
T. Keneklis, et al.
Sep 83, 218p, EPA-600/8-83-032A

This document summarizes current scientific information regarding the health and environmental effects of epichlorohydrin. The observed effects, as presented herein, constitute the health basis from which the U.S. Environmental Protection Agency will make a decision whether to list and to regulate epichlorohydrin as a hazardous air pollutant under the Clean Air Act. Specifically, this document discusses the following topics: physical and chemical properties of epichlorohydrin; environmental occurrence; metabolism, toxicology, and climination; and factors most relevant to assessing quantitative health risks.

Descriptors: Health assessment, Epichlorohydrin

PB84-130442 * PC A03/MF A01
Analysis of Residential Coal Stove Emissions
EPA, Research Triangle Park, NC, IERL
Battelle Columbus Div.
M. Cooke, et al.
Dec 83, 35p, EPA-600/7-83-060

The report gives results of an evaluation, in cooperation with the State of Vermont's Agency of Environmental Conservation, of emissions generated by antracite and bituminous coal used for residential heating. A residential coal stove was operated with both coals, while comparing high and low burn rate operations. A second stove, a commercial stove designed for wood burning but modified by the manufacturer for coal, was also tested with both coals. Combustion gases were collected by two techniques: evacuated glass bulbs and a Modified Method 5 sampling train. Volatile species were analyzed by direct gas mass spectrometry and by gas chromatography using selective detectors. Polynuclear aromatic hydrocarbons (PAHs) were analyzed by high resolution gas chromatography/mass spectrometry. High levels of particulates, total organics, and sulfur dioxide were found in the emissions from bituminous coal combustion in a residential coal stove. High PAH emissions were found with both bituminous and anthracite combustion. The stove converted from wood to coal burning proved to be highly polluting, especially when used with bituminous coal.

Descriptors: Emission factors document, Source sampling/ambient monitoring methodology, Buildings and structures, Combustion, Polycyclic aromatic hydrocarbons

PB84-140870 * PC A14/MF A01
Comprehensive Assessment of the Specific Compounds Present in Combustion Processes. Volume 1. Pilot Study of Combustion Emissions Variability
EPA, Washington, DC, OTS
Midwest Research Institute
C. Haile, et al.
Jun 83, 317p, EPA-560/5-83-004

This pilot study was conducted as a prelude to a nationwide survey of organic emissions from major stationary combustion sources. The primary objectives of the pilot study were to obtain data on the variability of organic emissions from two such sources and to evaluate the sampling and analysis methods. These data are used to construct the survey design for the nationwide survey. The compounds of interest are polynuclear aromatic hydrocarbons (PAHs) and chlorinated aromatic compounds, including polychlorinated biphenyls (PCBs), polychlorinated dibenzo-p-dioxins (PCDDs), and polychlorinated di-benzofurans (PCDFs). Of particular interest is 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD). In addition total cadmium was also determined in special samples from both plants to meet special Environmental Protection Agency (EPA) needs. A summary of the results of this study is contained in Section 2 of this report. Section 3 presents recommendations for future work. Brief descriptions of the two combustion sources are contained in Section 4. The sampling and analysis methods are described in Sections 5 and 6. Sections 7 and 8 present the field test data and analytical results. The analytical quality assurance results are summarized in Section 9. Section 10 presents the emissions results and Section 11 is a statistical summary of the emissions results.

Descriptors: Source sampling/ambient monitoring methodology, Combustion, Organic compounds, Cadmium, Electric power plants

PB84-141548 * PC A06/MF A01
Organic Emissions from Ferrous Metallurgical Industries: Compilation of Emission Factors and Control Technologies
EPA, Research Triangle Park, NC, IERL
Research Triangle Institute
R. L. Stallings
Jan 84, 119p, EPA-600/2-84-003

The report gives results of a review and analysis of the information and data available in the public domain on organic emissions from the ferrous metallurgy industry, specifically the iron and steel, iron foundry, and ferroalloy industries. Emission sources and information gaps are identified, and the credibility ratings or categories in these industries reported. Organic emission factors for various source categories in these industries are compiled. This report, which reflects accurately the present state of knowledge about organic emissions in the iron and steel, iron foundry, and ferroalloy industries, may be used as a guide to plan and direct programs for further studies, particularly a program to characterize more precisely those classes of organic species (comprising the volatile organic compound category) that are released from the potential sources identifed.

Descriptors: Emission factors document, Organic compounds, Metal industry, Iron and steel industry

PB84-142322 * PC A02/MF A01
Relative Airborne Losses of Commercial 2,4-D Formulations from a Simulated Wheat Field
EPA, Corvallis, OR, Corvallis Environmental Research Lab
J. D. Gile
83, 8p, EPA-600/J-83-126

The relative airborne losses of seven commercial 2,4-D (2,4-dichlorophenoxyacetic acid) formulations were evaluated in a simulated wheat field. The formulations tested were butyl ester, isooctyl ester, two propylene glycol butyl ether esters, ethanol/isopropyl amine, and two dimethyl amines. The butyl and isoctyl esters exhibited the greatest airborne losses, followed by the propylene glycol butyl ether esters. The amines were nearly nonvolatile. Two to 4 days after application, the 2,5-dichloro-4-hydroxyphenoxyacetic acid metabolite or 2,4-D predominated in all air samples. This material as well as the 2,4-D acid predominated in all plant samples with only traces of the parent esters observed. No extractable 2,4-D related residues were detected in the soil.

Descriptors: Source sampling/ambient monitoring methodology, Agriculture, 2,4-Dichlorophenoxyacetic acid

PB84-143254 * PC A15/MF A01
Draft Environmental Impact Statement Sulfur Oxides Emissions from Fluid Catalytic Cracking Unit Regenerators: Background Information for Proposed Standards
EPA, Research Triangle Park, NC, OAQPS
Jan 84, 343p, EPA-450/3-82-013A

Abstract: See PB-202 459

Descriptors: NSPS, Combustion, Petroleum refineries

PB84-144146 * PC A04/MF A01
Ambient Concentrations of Polycyclic Organic Matter
EPA, Research Triangle Park, NC, OAQPS
Radian Corp.
S. A. Smith
Oct 83, 72p, EPA-450/5-83-010A

This report is released to partially satisfy the requirements of Section 122 of the Clean Air Act, as amended in 1977. This report surveys and summarizes existing published polycyclic organic matter (POM) ambient concentration data.

Descriptors: Technical monitoring document, Source sampling/ambient monitoring methodology, Organic compounds

PB84-149152 * PC A15/MF A01
Health Assessment Document for Acrylonitrile
EPA, Research Triangle Park, NC, ECAO
D. K. Basu, et al.
Oct 83, 343p, EPA-600/8-82-007F

Acute acrylonitrile intoxication in humans, like many volatile organic compounds, results in irritation of the eyes and nose, weakness, labored breathing, dizziness, impaired judgment, cyanosis, nausea, and convulsions. Unlike many of these other organics, acrylonitrile causes severe burns upon contact with the liquid chemical. Some significant functional disorders of the liver and kidney are observed under subchronic exposure conditions; while chronic exposure results in signs (unhealthy appearance, weight loss and early death) that may be related to the low food and water consumption resulting from the unpleasant taste of acrylonitrile in water. Pathological changes in rats believed to be treatment related include hyperplasia and hyperkeratosis of the squamous cells in the brain and mammary gland hyperplasia in females. The present data base from human and toxicologic studies provides enough evidence such that the International Agency for Research on Cancer (IARC) has characterized acrylonitrile as an animal carcinogen and a likely human carcinogen. Unlike the animal bioassay data, the human data base does not unequivocally demonstrate a causal association.

Descriptors: Health assessment, Acrylonitrile

PB84-151448 * PC A19/MF A01
SO2 Emissions in Natural Gas Production Standards: Background Information for Proposed Standards
EPA, Research Triangle Park, NC, OAQPS
Nov 83, 438p, EPA-450/3-82-023A

Abstract: See PB-202 459

Descriptors: NSPS, Oil and gas industry

PB84-152073 * PC A09/MF A01
Inorganic Arsenic Emissions from Glass Manufacturing Plants - Background Information for Proposed Standards
EPA, Research Triangle Park, NC, OAQPS
Apr 83, 190p, EPA-450/3-83-011A

A national emission standard for glass manufacturing plants is being proposed under authority of Section 112 of the Clean Air Act. The purpose of the proposed standard is to minimize glass manufacturing furnace arsenic emissions to the level which, in the judgment of the Administrator of the U.S. Environmental Protection Agency, provides an ample margin of safety to protect the public health. The standard will have the effect of reducing uncontrolled emissions of arsenic from these furnaces by about 90 percent. Environmental impact and economic impact statements quantifying the impacts of the proposed standard and alternative control options are included in the document.

Descriptors: NESHAP, Arsenic (inorganic), Glass industry

PB84-153238 * PC A08/MF A01
Environmental Assessment: Source Test and Evaluation Report - Rectisol Acid Gas Removal
EPA, Research Triangle Park, NC, IERL
TRW, Inc.
K. W. Crawford, R. A. Orsini
Feb 84, 156p, EPA-600/7-84-014

The report gives results of tests of a Rectisol acid gas removal unit at a Texaco refinery. The primary goal was to provide a data base for evaluation of Rectisol performance in entrained coal gasification applications.

Descriptors: Source assessment, Source sampling/ambient monitoring methodology, Acids, Oil and gas industry, Petroleum refineries

PB84-154723 * PC A04/MF A01
Survey of Direct Analysis Methods for Organic Compounds in Particulate Matter
EPA, Research Triangle Park, NC, EMSL
Battelle Columbus Labs
C. A. Alexander, et al.
Jan 84, 54p, EPA-600/4-84-016

Spark source, secondary ion and direct probe mass spectroscopy and infrared, Raman and photoacoustic optical spectroscopy were evaluated for their present and potential usefulness in direct quantification and semiquantitative analysis of aromatic hydrocarbons in particulate matter.

Descriptors: Source sampling/ambient monitoring methodology, Organic compounds

PB84-155126 * PC A11/MF A01
Equipment Leaks of VOC (Volatile Organic Compounds) in Natural Gas Production Industry - Background Information for Proposed Standards
EPA, Research Triangle Park, OAQPS
Dec 83, 232p, EPA-450/3-82-024A

Abstract: See PB-202 459

Descriptors: NSPS, Organic compounds, Oil and gas industry

PB84-155803 * PC A10/MF A01
Health Assessment Document for Tetrachloroethylene (Perchloroethylene)
EPA, Washington, DC, OHEA
C. W. Chen, et al.
Dec 83, 222p, EPA-600/8-82-005B

Tetrachloroethylene (PCE) is a volatile solvent with important commercial applications. It has been detected in the ambient air of a variety of urban and non-urban areas of the United States. It has less frequently been detected in water but has been monitored generally at levels of 1 ppb or less. The lowest-observed-adverse-effect-level, based on central nervous system dysfunction, is about 100 ppm (678 mg/cu m). Toxicity testing in experimental animals, coupled with limited human data, suggests that long-term exposure of humans to ambient levels of PCE is not likely to represent a health concern. At the current time, the teratogenic potential of PCE for humans is unknown; the mammalian animal tests performed to date do not indicate any significant teratogenic potential. Although PCE epoxide has been found to be positive with respect to mutagenicity in bacterial systems, the data on pure PCE suggest that if it is mutagenic, it is a weak mutagen. PCE has been demonstrated to induce malignant tumors of the liver in mice. This constitutes limited evidence that PCE may be carcinogenic in humans. Because existing epidemiologic data for PCE is inconclusive, the overall ranking according to the criteria of the International Agency for Research on Cancer (IARC) would suggest that PCE is possibly carcinogenic in humans.

Descriptors: Health assessment, Perchloroethylene, Tetrachloroethylene

PB84-155845 * PC A19/MF A01
Sampling and Analysis Methods for Hazardous Waste Combustion
EPA, Research Triangle Park, NC, IERL
Arthur D. Little, Inc.
J. C. Harris, et al.
Feb 84, 441p, EPA-600/8-84-002

The report is a reference document, describing sampling and analysis methods for measuring the hazardous constituents which might be designated as principal organic hazardous constituents (POHCs) in the various influent and effluent streams of incineration facilities. The methods for these constituents are described in the text. Also included is a concise summary sheet for each recommended method which states the name and number of the method, the types of samples and specific analyses to which the method applies, a brief description of the method, instrument, and operating conditions, and reference(s) to more detailed descriptions of the procedure. Technician-level protocols are thus incorporated by reference, rather than by reproduction in this report. In addition to presenting the methods for sampling and analysis of POHCs at these facilities, information concerning additional sampling and analysis requirements, general strategies for preparing sampling and analysis plans to meet the regulatory requirements, and guidelines for reporting and documentation are discussed.

Descriptors: Source sampling/ambient monitoring methodology, Organic compounds, Hazardous waste disposal, Incinerators, Combustion

PB84-156264 * PC A25/MF A01
Wool Fiberglass Insulation Manufacturing Industry - Background Information for Proposed Standards
EPA, Research Triangle Park, NC, OAQPS
Dec 83, 576p, EPA-450/3-83-002A

Abstract: See PB-202 459

Descriptors: NSPS, Construction, Fiberglass manufacturing

PB84-157072 * PC A08/MF A01
Profile of Existing Hazardous Waste Incineration Facilities and Manufacturers in the United States
EPA, Cincinnati, OH, IERL
MITRE Corp.
E. Keitz, et al.
Feb 84, 167p, EPA-600/2-84-052

A wide variety of technical data pertaining to hazardous waste incinerators has been obtained both from incinerator manufacturers and facilities operating hazardous waste incinerators. This document discusses the data gathering and verification procedures and presents tabulations of the data. It is estimated that there are approximately 350 operational hazardous waste incinerators at 270 facilities in the United States which are subject to regulation under the Resource Conservation and Recovery Act.

Descriptors: Source assessment, Hazardous waste disposal, Incinerators

PB84-161421 * PC A03/MF A01
Gaseous Emissions from Excess Air Combustion of Explosives and Propellants
EPA, Cincinnati, OH, MERL
IT Enviroscience, Inc.
J. Mahannah, et al.
Feb 84, 31p, EPA-600/2-84-051

The purpose of this short-term project was to determine the levels of nitric oxide (NO), nitrogen dioxide (NO2), and carbon monoxide (CO) in the off-gases from the open burning of explosives in excess air. The ultimate goal is to reduce the level of NO(x), CO, and particulates emitted during the destruction of surplus, waste, and off-spec, explosives. Previous work (DOE) showed that a gravel/sand filter in the roof of a bunker reduced the level of particulates emitted during excess air combustion of propellants (only limited NO(x) or CO measurements were reported). The project demonstrated that the filter is effective in partially eliminating NO and CO emissions, but that additional work, including the incorporation of catalysts in the bed and the introduction of NO-control gases (e.g. NH3), should be undertaken.

Descriptors: Emission factors document, Organic compounds, Explosives industry, Hazardous waste disposal

PB84-162643 * PC A11/MF A01
Health Assessment Document for Dichloromethane (Methylene Chloride), External Review Draft
EPA, Washington, DC, OHEA
S. P. Bayard, et al.
Dec 83, 250p, EPA-600/8-82-0048

Dichloromethane (DCM) is a solvent widely used for a variety of purposes. It has been detected in the ambient air of urban and non-urban areas of the United States and also in natural and municipal waters. The weight of available evidence indicates that adverse toxicologic effects (other than carcinogenicity and mutagenicity) in humans are unlikely to occur at ambient air and water levels found or expected in the general environment. Available evidence suggests that the teratogenic potential of DCM is capable of causing gene mutations and has the potential to cause such effects in exposed human cells. The weight of evidence for carcinogenicity in animals is limited, according to the criteria of the International Agency for Research on Cancer (IARC). However, when the absence of epidemiological evidence is considered, the overall evaluation of DCM, according to IARC criteria, is that it is a Group 3 chemical in that it cannot be classified as to its carcinogenic potential for humans.

Descriptors: Health assessment, Methylene chloride, Dichloromethane

PB84-162882 * PC A14/MF A01
Health Assessment Document for Trichloroethylene, External Review Draft
EPA, Washington, DC, OHEA
L. D. Anderson, et al.
Dec 83, 320p, EPA-600/8-82-006B

Trichloroethylene (TCI) is a solvent widely used in the industrial degreasing of metals. It has been detected in the ambient air of a variety of urban and non-urban areas of the United States and also, in natural and municipal waters. The weight of available evidence obtained from both animal and human data suggests that long-term exposure to environmental levels of TCI poses no serious health concern to the general population. No teratogenic potential has been demonstrated for TCI in studies conducted to date with experimental animals. With respect to the mutagenic potential of TCI, the data on pure TCI do not allow a conclusion to be drawn. If TCI is mutagenic, the available data suggest it would be a very weak, indirect mutagen. Based on available animal cancer data, the classification of TCI under the criteria of the International Agency for Research on Cancer (IARC) could either be 'sufficient' or 'limited.' Because there are no adequate epidemiologic data, the overall ranking of TCI would place it in a category in which it would be a probable human carcinogen or one that cannot be classified as to its carcinogenicity.

Descriptors: Health assessment, Trichloroethylene

PB84-164060 * PC A04/MF A01
Metallic Mineral Processing Plants - Background Information for Promulgated Standards
EPA, Research Triangle Park, NC, OHEA
Jan 84, 57p, EPA-450/3-81-009C

Abstract: See PB-202 459

Descriptors: NSPS, Mineral industry, Metal industry

PB84-167683 * PC A06/MF A01
Benzene Emissions from Benzene Storage Tanks: Background Information for Proposal to Withdraw Proposed Standards
EPA, Research Triangle Park, NC, OAQPS
Mar 84, 104p, EPA-450/3-84-004

It is proposed to withdraw the proposed National Emission Standards for Hazardous Air Pollutants for the control of Benzene emissions from Benzene Storage Tanks. Previously, standards had been proposed under Section 112 of the Clean Air Act. This document contains background information considered in the proposed withdrawal of those previously proposed standards.

Descriptors: NESHAP, Benzene, Storage tanks, Petroleum refineries, Chemical industry

PB84-170174 * PC A03/MF A01
Benzene Emissions from Maleic Anhydride Plants: Background Information for Proposal to Withdraw Proposed Standards
EPA, Research Triangle Park, NC, OAQPS
Mar 84, 49p, EPA-450/3-84-002

This document contains information that formed the basis for the decision to withdraw standards proposed for the maleic anhydride industry April 18, 1980 (45 FR 26660). The report includes a summary of industry changes since proposal, a summary of public comments relevant to the withdrawal decision, and the rationale for the decision to withdraw proposed standards.

Descriptors: NESHAP, Benzene, Maleic anhydride plants, Chemical industry

PB84-170182 * PC A10/MF A01
Carcinogen Assessment of Coke Oven Emissions
EPA, Washington, DC, OHEA
Feb 84, 221p, EPA-600/6-82-003F

Coke oven workers in Allegheny County, Pennsylvania and at 10 non-Allegheny County coke plants in the United States and Canada were found to be at an excess risk of mortality from cancer of all sites and from cancer of the lungs, bronchus, trachea, kidney, and prostate. An important finding of this study was the dose-response found by both length of exposure and intensity of exposure (top or side of the ovens) for mortality from cancer of the lungs, bronchus, and trachea. A study of Japanese coke oven workers also found them to be at an excess risk of lung cancer mortality. British studies of cancer mortality in coke oven workers have generally been negative, but there were weaknesses in these studies. Coke oven emissions produce positive results in mutagenicity studies. Coal tar, a condensate of coke oven emissions, and various constituents of coke oven emissions have been found to be positive in both mutagenicity and animal carcinogenicity studies.

Descriptors: Health assessment, Coke oven emissions, Organic compounds, Coke ovens, Iron and steel industry

PB84-172105 * PC A04/MF A01
Literature Review on Occurrence and Methodology for Determination of Nickel, Chromium, Manganese, and Arsenic Species in Air
EPA, Research Triangle Park, EMSL
Battelle Columbus Labs
R. M. Riggin, E. J. Mezes, W. M. Henry
Mar 84, 56p, EPA-600/4-84-026

A critical literature review of the state of the art for speciation of arsenic, chromium, manganese, and nickel in atmospheric samples was performed. Techniques for distinguishing the compound forms and valence states of these metals were critically assessed. Three basic types of speciation procedures were identified: (a) direct analysis of particulate matter, (b) speciation of inorganic compounds after dissolution, and (c) sequential or selective extraction. Direct analysis techniques offer the possibility of determining specific compounds but are limited in sensitivity. The latter two techniques cannot determine specific inorganic compounds because of the inclusion of a dissolution step. However, such techniques may give useful information and are more generally applicable than direct analysis techniques. In a few cases (e.g., arsine), compounds may exist in the gas phase and can therefore be readily distinguished from other compound forms of the element.

Descriptors: Source sampling/ambient monitoring methodology, Nickel, Chromium, Manganese, Arsenic (inorganic)

PB84-175744 * PC A06/MF A01
Review of New Source Performance Standards for Grain Elevators
EPA, Research Triangle Park, NC, OAQPS
Jan 84, 105p, EPA-450/3-84-001

Abstract: See PB-202 459

Descriptors: NSPS, Grain elevators, Agriculture

PB84-176874 * PC A04/MF A01
Benzene Emissions from Ethylbenzene/Styrene Plants - Background Information for Proposal to Withdraw Proposed Standards
EPA, Research Triangle Park, NC, OAQPS
Mar 84, 56p, EPA-450/3-84-003

This document contains information that formed the basis for the decision to withdraw standards for the ethylbenzene/styrene industry proposed December 18, 1980 (45 FR 83448). The report includes a summary of industry changes since proposal, a summary of public comments relevant to the withdrawal decision, and the rationale for the decision to withdraw proposed standards.

Descriptors: NESHAP, Benzene, Ethylbenzene/styrene plants, Chemical industry

PB84-177765 * PC A03/MF A01
Laboratory Evaluation of Tunable Atomic Line Molecular Spectrometers for Benzene Analysis
EPA, Research Triangle Park, NC, EMSL
D. R. Scott, R. L. Hedgecoke
Apr 84, 43p, EPA-600/4-84-030

Tunable Atomic Line Molecular Spectroscopy (TALMS) is a high resolution, differential absorption technique used in the ultraviolet region. Under Interagency Agreements EPA-80-D-X1014 and AD-89-F-2A008 with Lawrence Berkeley Laboratory, two prototype TALMS instruments were designed, constructed, and delivered to the U.S. EPA at Research Triangle Park, North Carolina. TALMS I was a large laboratory instrument designed to demonstrate the feasibility of TALMS detection of toxic organic compounds. TALMS II was a more compact monitor for benzene designed for possible field applications. Both instruments were evaluated in the laboratory for performance characteristics in the analysis of benzene using the 253.7 nm mercury line. The tests included detection limit, precision, effect of temperature (TALMS I), effect of pressure (TALMS II), and interferences from organic compounds other than benzene. The prototype instruments evaluated can detect benzene precisely above the detection limit of 6 microgram. The apparent interferences from toluene and pyridine are relatively small and may be artifacts which can be eliminated with improvements in electronic signal processing. It was recommended that changes to the sample cell and electronics be made to improve the detection limit and that extension of the capabilities of TALMS to other organic compounds be made.

Descriptors: Source sampling/ambient monitoring methodology, Benzene

PB84-179951 * PC A25/MF A01
Review of New Source Performance Standards for Primary Copper Smelters: Chapters 1 through 9
EPA, Research Triangle Park, NC, OAQPS
Mar 84, 586p, EPA-450/3-83-018A

Abstract: See PB-202 459

Descriptors: NSPS, Copper smelters, Smelters

PB84-179969 * PC A08/MF A01
Review of New Source Performance Standards for Primary Copper Smelters: Appendices
EPA, Research Triangle Park, NC, OAQPS
Mar 84, 153p, EPA-450/3-83-018B

Abstract: See PB-202 459

Descriptors: NSPS, Copper smelters, Smelters

PB84-181825 * PC A04/MF A01
Final Environmental Impact Statement Synthetic Fiber Production Facilities: Background Information Promulgated Standards
EPA, Research Triangle Park, NC, OAQPS
Mar 84, 66p, EPA-450/3-82-011B

Abstract: See PB-202 459

Descriptors: NSPS, Organic compounds, Synthetic fiber industry, Textile industry

PB84-181882 * PC A04/MF A01
Analysis of Polynuclear Aromatic Hydrocarbons in Particulate Matter by Luminescence Techniques
EPA, Research Triangle Park, NC, EMSL
Battelle Columbus Labs
W. A. Ivancic, et al.
Apr 84, 55p, EPA-600/4-84-003

Fluorescence, phosphorescence, and heavy-metal activated room temperature phosphorescence spectra were obtained for ten polycyclic aromatic hydrocarbon (PAH) reference compounds individually and in mixtures on quartz plates and particulate matter. The results indicate that multicomponent analysis of PAHs on airborne particulate matter may be possible with the development of appropriate multicomponent spectral deconvolution procedures. The direct analysis approach in combination with the use of solvent extraction followed by fluorescence analysis can provide a rapid means of analysis for PAHs both within and on the surface of particulate matter. Direct phosphorescence was too weak to be useful at 5-10 micrograms/g levels found in many types of particulate samples. Heavy-metal activated room-temperature phosphorescence appears more sensitive to matrix and substrate effects and less amenable to multicomponent analysis than fluorescence. The fluorescence spectrum of benzo(a)pyrene was found to be affected by exposure to low levels of ozone. However, the fluorescence spectrum retains characteristic features that enable identification of the benzo(a)pyrene.

Descriptors: Source sampling/ambient monitoring methodology, Polynuclear aromatic hydrocarbons

PB84-182880 * PC A08/MF A01
Draft Health Assessment Document for Hexachlorocyclopentadiene
EPA, Cincinnati, OH, ECAO
D. J. Reisman
Feb 84, 169p, EPA-600/8-84-001A

The Office of Health and Environmental Assessment of the Office of Research and Development has prepared this health assessment document (HAD) at the request of the Office of Air Quality Planning and Standards. Hexachlorocyclopentadiene (HEX) is an intermediate in the pesticide and flame retardant manufacturing processes and is currently being studied by the Environmental Protection Agency (EPA) to determine if it should be regulated as a hazardous air pollutant. The scientific literature and key studies have been received and evaluated and summaries and conclusions have been directed at the health effects from exposure to HEX. This peer-reviewed document contains information on HEX covering toxicity, environmental fate and transport, aquatic effects, mutagenicity, epidemiology, teratogenicity and other health effects data. The data base is neither extensive nor adequate for assessing the carcinogenicity or long-term health effects of acute or low-level chronic exposure to HEX.

Descriptors: Health assessment, Hexachlorocyclopentadiene

PB84-183565 * PC A09/MF A01
Health Assessment Document for 1,1,1-Trichloroethane (Methyl Chloroform)
EPA, Research Triangle Park, NC, ECAO
R. Carchman, et al.
Feb 84, 181p, EPA-600/8-82-003F

Methyl chloroform (MC) is a volatile chlorinated hydrocarbon used extensively as an industrial solvent and in consumer products. It has been detected in the ambient air of a variety of urban and non-urban areas of the United States. In certain instances involving contamination of groundwater, much higher levels have been reported. The weight of available evidence obtained from human and animal data suggest that long-term exposure to environmental levels of MC poses no serious health concern to the general population. No tetratogenic potential has been demonstrated for MC in studies conducted to date in rodent species. Available data are inadequate for reaching firm conclusions about its mutagenic potential in humans. Because of the limited usefulness of the animal bioassays conducted to date, it is not possible to classify MC in regard to its carcinogenic potential in humans.

Descriptors: Health assessment, Methyl chloroform, 1,1,1-Trichloroethane

PB84-186832 * PC A07/MF A01
Draft Asbestos Health Assessment Update
EPA, Research Triangle Park, NC, ECAO
Mount Sinai School of Medicine
W. J. Nicholson
Feb 84, 146p, EPA-600/8-84-003A

Data developed since the early 1970s from large population studies with long follow-up strengthen the association of asbestos exposure to disease. Lung cancer and mesothelioma are the most important asbestos-related causes of death among exposed individuals. The accumulated data suggest that the excess risk of lung cancer from asbestos exposure is proportional to the cumulative exposure (the duration times the intensity) and the underlying risk of lung cancer in the absence of exposure. The risk of death from mesothelioma appears to be proportional to the cumulative exposure to asbestos in a given period. Animal studies confirm the human epidemiological results. All major asbestos varieties produce lung cancer and mesothelioma with only limited differences in carcinogenic potency. Some measurements demonstrate that significant asbestos exposure, exceeding 100 times the background, occurs to individuals in non-occupational environments. Currently, the most important of these non-occupational exposures is from the release of fibers from asbestos-containing surfacing materials in schools, auditoriums, and other public buildings or from asbestos fireproofing sprayed in high-rise office buildings.

Descriptors: Health assessment, Asbestos

PB84-189646 * PC A03/MF A01
Method for Collection and Analysis of Chlorobenzenes
EPA, Research Triangle Park, NC, ESRL
Monsanto Company
G. W. Wooten, et al.
Jun 84, 39p, EPA-600/S3-84-058

To measure individual exposures to potentially hazardous organic compounds including halogenated hydrocarbons and benzene, personal monitors using sorbent-based passive samples (passive exposure monitors) and analytical methodology using gas chromatographic analytical techniques were developed. The sampling/analytical techniques were evaluated under laboratory conditions with generated vaporous samples of known concentration for the compounds of interest and optimized for detection and quantitation. The passive dosimeter and analytical technique used for this project was found to be capable of detecting 0.5 ppb of the subject compounds after as little as one-half hour of sampling. Passive dosimeter results correlated well with results obtained on pumped sorbent tubes collected in parallel. The sampling/analytical methods were further validated with field samples, focusing on a quantitative analysis of the halogenated hydrocarbons and benzene.

Descriptors: Source sampling/ambient monitoring methodology, Chlorobenzenes

PB84-190891 * PC A15/MF A01
Health Assessment Document for Inorganic Arsenic
EPA, Research Triangle Park, NC, ECAO
D. Jacobson-Kram, et al.
Mar 84, 350p, EPA-600/8-83-021F

Inorganic arsenic, predominantly the tri- and pentavalent forms, is emitted to the environment primarily through smelting activity, biocide use and glass manufacturing. Monitoring data indicate a concentration of equal to or less than 0.1 microgram/cu m for most locations. Major routes of absorption of inorganic arsenic in the general population are inhalation and ingestion. Inhaled inorganic arsenic deposited in the lungs is eventually absorbed. Most ingested soluble inorganic arsenic is absorbed, whereas insoluble forms pass through the gastrointestinal tract with negligible absorption. Inorganic arsenic metabolism in man is complicated by biotransformation processes which include the methylation and oxidation-reduction interconversion of inorganic arsenic. Long-term accumulation of inorganic arsenic does not generally occur in physiologically active compartments in the body; renal clearance appears to be the major route of excretion of absorbed inorganic arsenic. Acute symptoms of inorganic arsenic poisoning include severe gastrointestinal damage, facial edema, cardiovascular reactions, peripheral nervous system disturbances, and hematopoietic system effects. General population concerns arising from long-term exposures to moderate levels of inorganic arsenic include respiratory tract cancer, skin cancer, non-cancerous skin lesions, peripheral neuropathological effects and cardiovascular effects. There appears to be a nutritional requirement for low levels of inorganic arsenic in certain experimental animals; however, this requirement has not yet been established in man.

Descriptors: Health assessment, Arsenic (inorganic)

PB84-191543 * PC A03/MF A01
Environmental Impact Statement for Lime Manufacturing Plants: Background Information for Promulgated Standards
EPA, Research Triangle Park, NC, OAQPS
Mar 84, 49p, EPA-450/3-84-008

Abstract: See PB-202 459

Descriptors: NSPS, Lime industry

PB84-195163 * PC A17/MF A01
Health Assessment Document for Chloroform: External Review Draft. Parts 1 and 2
EPA, Research Triangle Park, NC, ECAO
Mar 84, 399p, EPA-600/8-84-004A

This document represents a comprehensive data base that considers all sources of chloroform in the environment, the likelihood of human exposures and the possible consequences to man and lower organisms from its absorption. This information is integrated into a format that can serve as the basis for qualitative and quantitative risk assessments, while at the same time identifying gaps in our knowledge that limit present evaluative capabilities. Accordingly, it is expected that this document may serve the information needs of many government agencies and private groups that may be involved in decision making and regulatory activities.

Descriptors: Health assessment, Chloroform

PB84-200609 * PC A04/MF A01
Locating and Estimating Air Emissions from Sources of Acrylonitrile
EPA, Research Triangle Park, NC, OAQPS
Radian Corp.
Mar 84, 70p, EPA-450/4-84-007A

To assist groups interested in inventorying air emissions of various potentially toxic substances, EPA is preparing a series of documents such as this to compile available information on sources and emissions of these substances. This document deals specifically with acrylonitrile. Its intended audience includes Federal, State and local air pollution personnel and others interested in locating potential emitters of acrylonitrile and in making gross estimates of air emissions therefrom. This document presents information on (1) the types of sources that may emit acrylonitrile, (2) process variations and release points that may be expected within these sources, and (3) available emissions information indicating the potential for chloroform release into the air from each operation.

Descriptors: Emission factors document, Acrylonitrile

PB84-200617 * PC A06/MF A01
Locating and Estimating Air Emissions from Sources of Chloroform
EPA, Research Triangle Park, NC, OAQPS
GCA Corp.
Mar 84, 102p, EPA-450/4-84-007C

To assist groups interested in inventorying air emissions of various potentially toxic substances, EPA is preparing a series of documents such as this to compile available information on sources and emissions of these substances. This document deals specifically with chloroform. Its intended audience includes Federal, State and local air pollution personnel and others interested in locating potential emitters of chloroform and in making gross estimates of air emissions therefrom. This document presents information on (1) the types of sources that may emit chloroform, (2) process variations and release points that may be expected within these sources, and (3) available emissions information indicating the potential for chloroform release into the air from each operation.

Descriptors: Emission factors document, Chloroform

PB84-200625 * PC A07/MF A01
Locating and Estimating Air Emissions from Sources of Carbon Tetrachloride
EPA, Research Triangle Park, NC, OAQPS
GCA Corp.
Mar 84, 128p, EPA-450/4-84-007B

To assist groups interested in inventorying air emissions of various potentially toxic substances, EPA is preparing a series of documents such as this to compile available information on sources and emissions of these substances. This document deals specifically with carbon tetrachloride. Its intended audience includes Federal, State and local air pollution personnel and others interested in locating potential emitters of chloroform and in making gross estimates of air emissions therefrom. This document presents information on (1) the types of sources that may emit chloroform, (2) process variations and release points that may be expected within these sources, and (3) available emissions information indicating the potential for chloroform release into the air from each operation.

Descriptors: Emission factors document, Carbon tetrachloride

PB84-200633 * PC A07/MF A01
Locating and Estimating Air Emissions from Sources of Formaldehyde
EPA, Research Triangle Park, NC, OAQPS
GCA Corp.
Mar 84, 128p, EPA-450/4-84-007E

To assist groups interested in inventorying air emissions of various potentially toxic substances, EPA is preparing a series of documents such as this to compile available information on sources and emissions of these substances. This document deals specifically with formaldehyde. Its intended audience includes Federal, State and local air pollution personnel and others interested in locating potential emitters of formaldehyde and in making gross estimates of air emissions therefrom. This document presents information on (1) the types of sources that may emit chloroform, (2) process variations and release points that may be expected within these sources, and (3) available emissions information indicating the potential for chloroform release into the air from each operation.

Descriptors: Emission factors document, Formaldehyde

PB84-209477 * PC A16/MF A01
Benzene Emissions from Coke By-Product Recovery Plants
- Background Information for Proposed Standards
EPA, Research Triangle Park, NC, OAQPS
May 84, 356p, EPA-450/3-83-016A

National emission standards to control emissions of benzene from new and existing coke by-product recovery plants are being proposed under Section 112 of the Clean Air Act. This document contains information on the background and authority, regulatory alternatives considered, and environmental and economic impacts of the regulatory alternatives.

Descriptors: NESHAP, Benzene, Iron and steel industry, Coke ovens

PB84-209865 * PC A17/MF A01
Health Assessment Document for 1,2-Dichloroethane
(Ethylene Dichloride). External Review Draft.
Parts 1 and 2
EPA, Washington, DC, OHEA
S. Bosch, et al.
Apr 84, 395p, EPA-600/8-84-006A

Ethylene Dichloride (EDC), a clear, colorless volatile liquid, is principally emitted to the environment during manufacturing. Monitoring data, including ambient urban areas, indicate a concentration of equal to or less than 0.5 ppb for most locations. EDC is rapidly absorbed, metabolized, and eliminated. Unmetabolized EDC is eliminated almost exclusively via the lungs. In humans the symptoms of acute toxicity from repeated exposures exceeding 60 ppm are irritation of the respiratory tract and eyes and CNS depression. According to available evidence EDC does not adversely affect the reproductive or development process in animals except at maternally toxic levels. Additional human epidemiologic studies are needed to establish conclusively that EDC is not a teratogen and does not cause adverse reproductive effects. Positive responses in different test systems indicate that EDC is a weak, direct-acting mutagen; however, several of its metabolities, formed in animals, are more potent mutagens than EDC. As a carcinogen, EDC induces tumors in rats and mice by various routes of exposure (gavage, intraperitoneally, dermally). However, lifetime inhalation exposure conditions did not produce tumors in rats or mice. Results from animal carcinogen studies, when considered with the positive evidence of mutagenicity and the presence of reactive metabolities and covalent bonding to DNA, suggest that EDC is a potential human carcinogen.

Descriptors: Health assessment, Ethylene dichloride, 1,2-Dichloroethane

PB84-209873 * PC A13/MF A01
Health Assessment Document for Ethylene Oxide.
External Review Draft
EPA, Washington, DC, OHEA
A. Gray, et al.
Apr 84, 289p, EPA-600/8-84-009A

The largest single use of ethylene oxide is an intermediate in the synthesis of ethylene glycol. However, small amounts of this epoxide are used as a sterilant or pesticide in commodities, pharmaceuticals, medical devices, tobacco, and other items, representing a considerable potential for human exposure. The pharmacokinetics of ethylene oxide have not been studied extensively. While no studies found in the literature searched concerned the absorption of this chemical, toxicity data suggest that exposure to ethylene oxide in humans results in symptoms of headache, vomiting, dyspnea, and diarrhea. Subacute and chronic effects are not well documented. Data indicate that many different types of genetic damage may be induced following exposure to ethylene oxide. It was found to be mutagenic in the Ames Salmonella assay to Bacillus subtilis and to Drosophilia melanogaster, as well as in cultured mammalian cell and assay systems. The alkylating and mutagenic properties of ethylene oxide are sufficient causes of concern about its potential carcinogenicity. Though there are no definitive, epidemiologic studies, the data are consistent with the animal data in that there seems to be a strong association between an increased risk of cancer, especially leukemia, and prolonged inhalation exposure to ethylene oxide.

Descriptors: Health assessment, Ethylene oxide

PB84-210046 * PC A04/MF A01
Passive Sampling Device for Ambient Air and Personal
Monitoring
EPA, Research Triangle Park, NC, EMSL
Monsanto Co.
G. W. Wooten, et al.
Jun 84, 72p, EPA-600/4-84-050

A high performance passive dosimeter has been developed and evaluated as a monitor for volatile organics in ambient air and for short-term, low-level personal monitoring applications. The dosimeter design was dictated by three major areas of concern: (1) diffusive mass transport considerations; (2) sorbent selection, and (3) chemical quantitation of the collected compounds, which intimately involves desorption procedures of the passive device.

Descriptors: Source sampling/ambient monitoring methodology, Organic compounds

PB84-210301 * PC A11/MF A01
Benzene Fugitive Emissions - Background Information for
Promulgated Standards
EPA, Research Triangle Park, NC OAQPS
Jun 82, 234p, EPA-450/3-80-032B

A national emission standard for the control of fugitive emissions of benzene from the petroleum refining and organic chemical manufacturing industries is being promulgated under Section 112 of the Clean Air Act (42 U.S.C. 7412, as amended). This standard will limit fugitive emissions of benzene from existing and new equipment in benzene service. This document summarizes the responses to public comments received on the proposed standards and also summarizes the basis for changes made in the standards since proposal.

Descriptors: NESHAP, Benzene, Petroleum refineries, Chemical industry

PB84-210988 * PC A09/MF A01
Locating and Estimating Air Emissions from Sources of Nickel
EPA, Research Triangle Park, NC, OAQPS
Radian Corp.
Mar 84, 100p, EPA-450/4-84-007F

To assist groups interested in inventorying air emissions of various potentially toxic substances, EPA is preparing a series of documents such as this to compile available information on sources and emissions of these substances. This document deals specifically with nickel. Its intended audience includes Federal, State and local air pollution personnel and others interested in locating potential emitters of nickel and in making gross estimates of air emissions therefrom. This document presents information on (1) the types of sources that may emit nickel, (2) process variations and release points that may be expected within these sources, and (3) available emissions information indicating the potential for nickel release into the air from each operation.

Descriptors: Emission factors document, Nickel

PB84-214006 * PC A17/MF A01
Distillation Operations in Synthetic Organic Chemical Manufacturing - Background Information for Proposed Standards
EPA, Research Triangle Park, NC, OAQPS
Dec 83, 395p, EPA-450/3-83-005A

Abstract: See PB-202 459

Descriptors: NSPS, Organic compounds, Chemical industry

PB84-220268 * PC A25/MF A01
Health Assessment Document for Polychlorinated Dibenzo-p-Dioxins. Parts 1 and 2, External Review Draft
EPA, Cincinnati, OH, ECAO
May 84, 592p, EPA-600/8-84-014A

Dioxins are a class of compounds that contain the dibenzo-p-dioxin nucleus. In the chlorinated dioxins, the dibenzo-p-dioxin nucleus is substituted with chlorine at different positions of the fused benzene rings. Depending on the number and position of chlorine substitution, 75 congeners are possible for the chlorinated dioxins. This document deals with the most toxic chlorinated dioxins, namely, 2,3,7,8-tetrachloro-, 1,2,3,7,8-penta-chloro-, 1,2,3,6,7,8-hexachloro-, and 1,2,3,7,8,9-hexachlor-odibenzo-p-dioxon. Of these four congeners, the 2,3,7,8-tetrachlorodibenzo-p-dioxin has been studied extensively. This compound is often described in both popular and technical literature as 'TCDD' or simply 'dioxin'. A few documents exist at the present time that deal with selected aspects of polychlorinated dibenzo-p-dioxins in the environmental media. This document has been prepared to provide a comprehensive multi-media assessment of the analytical methodologies, environmental levels and ecological and health effects of the four chlorinated dioxins mentioned above.

Descriptors: Health assessment, Dioxins

PB84-220359 * PC A99/MF A01
Health Assessment Document for Chlorinated Benzenes. Parts 1 and 2, External Review Draft
EPA, Cincinnati, OH, ECAO
Apr 84, 626p, EPA-600/8-84-015A

This document summarizes the current knowledge of the effects of exposure to the chlorinated benzenes on human health. The chlorinated benzenes are persistent to chemical and biological degradation and tend to accumulate in liquid-containing tissues of animals and humans. The ubiquitous environmental distribution of the chlorinated benzenes and their bioconcentration in humans are a basis for concern over the consequences of chronic exposure to human health. The rationale for structuring this document is based primarily on two major issues, exposure and response. The first portion of the document is devoted to the chlorinated benzenes in the environment: physical and chemical properties, the monitoring of the chlorinated benzenes in various media, natural and human-made sources, the transport and distribution of the chlorinated benzenes within environmental media, and the levels of exposure. The second part is devoted to biological responses in laboratory animals and humans including metabolism, pharmacokinetics, as well as the toxicological effects of the chlorinated benzenes.

Descriptors: Health assessment, Chlorobenzenes

PB84-229954 * PC A16/MF A01
Health Assessment Document for Manganese
EPA, Cincinnati, OH, ECAO
H. Bilinski, et al.
Aug 84, 353p, EPA-600/8-83-013F

The document evaluates data on occurrence, sources, and transport of manganese in the environment and data on metabolism, pharmacokinetics, laboratory toxicological and epidemiologic studies to determine the nature and dose response relationship of potential health effects on humans. Nationwide air sampling data indicate that mean manganese concentrations have declined from 0.11 micrograms per cu. m. in 1953-1957 to 0.033 micrograms per cu. m. in 1982. The effects of major concern to humans exposed to manganese are on neurological and on pulmonary function. The CNS effects have been observed in humans at exposure levels above 5 mg/cu. m. and are incapacitating and generally irreversible. Data are equivocal between 1 and 5 mg/cu. m. but suggest decreased prevalence. There are no reports of these effects below 0.3 mg/cu. m. exposure. Pneumonia and chronic bronchitis occur at levels which are associated with neurological effects. Reduced lung function has been reported in children exposed to an estimated 3-11 micrograms per cu. m. from emission of a ferromanganese plant. However, studies of workers exposed to 40 micrograms per cu. m. did not show respiratory symptoms. Animal studies qualitatively support pulmonary effects of manganese exposure. Respiratory symptoms occur at lower levels than neurological symptoms and are therefore considered to be the critical effect based on available data.

Descriptors: Health assessment, Manganese

PB84-237320 * PC A12/MF A01
VOC Emissions from Volatile Organic Liquid Storage Tanks - Background Information for Proposed Standards
EPA, Research Triangle Park, NC, OAQPS
Jul 84, 267p, EPA-450/3-81-003A

Abstract: See PB-202 459

Descriptors: NSPS, Organic compounds, Storage tanks, Chemical industry, Petroleum refineries

PB84-239193 * PC A05/MF A01
Locating and Estimating Air Emissions from Sources of Ethylene Dichloride
EPA, Research Triangle Park, NC, OAQPS
GCA Corp.
Mar 84, 97p, EPA-450/4-84-007D

To assist groups interested in inventorying air emissions of various potentially toxic substances, EPA is preparing a series of documents such as this to compile available information on sources and emissions of these substances. This document deals specifically with ethylene dichloride. Its intended audience includes Federal, State, and local air pollution personnel and others interested in locating potential emitters of ethylene dichloride and in making gross estimates of air emissions therefrom. This document presents information on (1) the types of sources that may emit ethylene dichloride, (2) process variations and release points that may be expected within these sources, and (3) available emissions information indicating the potential for ethylene dichloride release into the air from each operation.

Descriptors: Emission factors document, Ethylene dichloride

PB84-245273 * PC A09/MF A01
Compilation of Air Toxic and Trace Metal Summary Statistics
EPA, Research Triangle Park, NC, OAQPS
W. F. Hunt, Jr., R. B. Faoro, G. M. Dussan
Jul 84, 177p, EPA-450/4-84-015

The report summarizes both air toxic data compiled by Dr. Hanwant B. Singh of SRI International and selected trace metal and benzo(a)pyrene data contained on the National Aerometric Data Bank's (NADB) Storage and Retrieval of Aerometric Data (SAROAD). The pollutants, that are summarized, are listed in Tables 1 and 2. Table 1 is a list of 37 priority chemicals under assessment as potential carcinogens (Type A pollutants), while Table 2 lists 50 additional chemicals that are under assessment (Type B pollutants). Of the 37 pollutants listed in Table 1, data were obtained on 24 pollutants. This compares with finding information on only 17 of the 50 additional chemicals. In addition to the above pollutants, arsenic and benzene are summarized in Attachment A. Emphasis has been placed on obtaining long-term averages to match the concern with chronic long-term exposure to human populations to these pollutants. A long-term averaging time may be appropriate for known and suspected carcinogens depending on the compounds ability to induce significant health impacts.

Descriptors: Technical monitoring document, Metals, Benzo(a)pyrene, Arsenic, Benzene, Organic compounds

PB85-110567 * PC A03/MF A01
Petroleum Dry Cleaners - Background Information for Promulgated Standards
EPA, Research Triangle Park, NC, OAQPS
Sep 84, 26p, EPA-450/3-82-012B

Abstract: See PB-202 459

Descriptors: NSPS, Dry cleaning

PB85-115905 * PC A16/MF A01
Health Assessment Document for Chromium
EPA, Research Triangle Park, NC, ECAO
Jun 84, 354p, EPA-600/8-83-014F

This document summarizes current, scientific information regarding the effects of chromium on man and on the environment. Specifically, this document discusses the following topics: physical and chemical properties of chromium; environmental distribution and cycling; and the metabolism, toxicology, and essentiality of chromium. In addition, this document identifies the factors most germane to assessing quantitative, human health risks.

Descriptors: Health assessment, Chromium

PB85-124204 * PC A03/MF A01
Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels in Steel Plants--Background Information for Promulgated Standards of Performance
EPA, Research Triangle Park, NC, OAQPS
Aug 84, 38p, EPA-450/3-82-020B

Abstract: See PB-202 459

Descriptors: NSPS, Iron and steel industry, Electric arc furnaces

PB (Pending. * PC (Pending)
Availability noted below)
Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air
EPA, Research Triangle Park, NC, EMSL
Battelle Columbus Labos
J. M. Riggin
Apr 84, 149p, EPA-600/4-84-041

Available from EPA at the following address: ORD Publications - CERI-FRN, U.S. EPA, 26 W. St. Clair, Cincinnati, OH 45286, Tel. (513) 684-7562

This Methods Compendium has been prepared to provide regional, state, and local environmental regulatory agencies, as well as other interested parties, with specific guidance on the determination of selected toxic organic compounds in ambient air. This methods compendium has been prepared to provide a standardized format for such analytical procedures. A core set of five methods is presented in the current document. Addition of specific methods to the compendium will occur as suitable methods become available. Additionally, the current methods may be modified from time to time as advancements are made.

Descriptors: Source sampling/ambient monitoring methodology, Organic compounds

36 FR 23239 (Dec 7, 1971) *
National Emission Standards for Hazardous Air Pollutants, Proposed Standards for Asbestos, Beryllium, and Mercury
EPA, Research Triangle Park, NC, OAQPS

Proposed rule. This document announces inclusion of asbestos, beryllium and mercury in the list of hazardous air pollutants, describes emission sources and control options available for each pollutant, and defines appropriate test methods and procedures for sampling.

Descriptors: FR notice, Asbestos, Beryllium, Mercury, Milling, Manufacturing asbestos products, Construction, Buildings and structures, Roadway surfacing, Demolition and renovation, Machine shops, Ceramic plants, Foundries, Rocket motor firing, Incinerators, Hazardous waste disposal, Metal industry, Mercury ore processing, Chlor-alkali plants, Chemical industry

38 FR 8820 (Apr 6, 1973) *
National Emission Standards for Hazardous Air Pollutants: Asbestos, Beryllium, and Mercury
EPA, Research Triangle Park, NC, OAQPS

Final rule. This notice summarizes the bases for the Administrator's determinations that asbestos, beryllium, and mercury are hazardous. It explains the derivations of the standards now adopted, the Environmental Protection Agency's responses to the significant comments received, and the principal revisions to the proposed standards.

Descriptors: FR notice, Asbestos, Beryllium, Mercury Milling, Manufacturing asbestos products, Construction, Buildings and structures, Roadway surfacing, Demolition and renovation, Machine shops, Ceramic plants, Foundries, Rocket motor firing, Incinerators, Hazardous waste disposal, Metal industry, Mercury ore processing, Chlor-alkali plants, Chemical industry

39 FR 38064 (Oct 25, 1974) *
Asbestos and Mercury, Proposed Admendments to National Emission Standards for Hazardous Air Pollutants
EPA, Research Triangle Park, NC, OAQPS

Proposed amendments to the standards for asbestos and mercury. These amendments include the addition of the manufacture of both shotgun shells and asphalt concrete as major sources of asbestos and the addition of sewage sludge drying or incineration as a major source of mercury. The notice also proposes amendments to Appendix B, Test Methods.

Descriptors: FR notice, Asbestos, Mercury, Construction, Demolition and renovation, Hazardous waste disposal, Incinerators, Manufacturing asbestos products, Fabrication, Sewage sludge incinerators

40 FR 48299 (Oct 14, 1975) *
National Emission Standards for Hazardous Air Pollutants, Amendments to Standards for Asbestos and Mercury
EPA, Research Triangle Park, NC, OAQPS

Promulgation of the proposed standards as amended. This notice summarizes principal changes to the proposed amendments and the Agency's responses to the major comments received.

Descriptors: FR notice, Asbestos, Mercury, Construction, Demolition and renovation, Hazardous waste disposal, Incinerators, Manufacturing asbestos products, Fabrication, Sewage sludge incinerators

40 FR 59532 (Dec 24, 1975) *
National Emission Standards for Hazardous Air Pollutants, Proposed Standard for Vinyl Chloride
EPA, Research Triangle Park, NC, OAQPS

Proposed rule. The proposed national emission standard covers vinyl chloride emissions from ethylene dichloride-vinyl chloride and polyvinyl chloride plants. The notice describes the rationale for regulating vinyl chloride under the authority of Section 112 of the Clean Air Act.

Descriptors: FR notice, Vinyl chloride, Ethylene dichloride/vinyl chloride plants, Polyvinyl chloride plants, Chemical industry

41 FR 19585 (May 12, 1976) *
Phosphate Fertilizer Plants
EPA, Research Triangle Park, NC, OAQPS

Draft guideline document availability. This notice announces availability of a draft guideline document for the control of atmospheric fluoride emissions from existing phosphate fertilizer plants and invites public comments on the contents of the document. The notice announces the Administrator's determination that fluoride emissions are a welfare-related, rather that a health-related, pollutant.

Descriptors: FR notice, Phosphates, Fertilizer industry

41 FR 46561 (Oct 21, 1976) *
National Emission Standards for Hazardous Air Pollutants, Standard for Vinyl Chloride
EPA, Research Triangle Park, NC, OAQPS

Final rule. In ethylene dichloride-vinyl chloride plants, the standard limits vinyl chloride emissions from the ethylene dichloride and vinyl chloride formation and purification processes to 10 ppm. For the oxychlorination process, vinyl chloride emissions are limited to 0.2 g/kg of ethylene dichloride product.

Descriptors: FR notice, Vinyl chloride, Ethylene dichloride/vinyl chloride plants, Polyvinyl chloride plants, Chemical industry

41 FR 48706 (Nov 4, 1976) *
Standards of Performance for New Stationary Sources, Emission Guidelines for the Control of Sulfuric Acid Mist from Existing Sulfuric Acid Production Units
EPA, Research Triangle Park, NC, OAQPS

Draft guideline document availability. The purpose of this notice is to propose emission guidelines and times for compliance for the control of sulfuric acid mist emissions from existing sulfuric acid production units, and to announce the publication of a draft guideline document concerning the control of sulfuric acid mist emissions from such units. The notice announces the Administrator's determination that sulfuric acid mist is a health-related pollutant.

Descriptors: FR notice, Sulfuric acid, Sulfuric acid plants

42 FR 12022 (Mar 1, 1977) *
Phosphate Fertilizer Plants
EPA, Research Triangle Park, NC, OAQPS

Final guideline document availability. This notice announces availability of the final guideline document for the control of atmospheric fluoride emissions from existing phosphate fertilizer plants. This action triggers the development of state plans to control fluoride emissions from existing phosphate fertilizer facilities under Section 111(d) of the Clean Air Act.

Descriptors: FR notice, Phosphates, Fertilizer industry

42 FR 12122 (Mar 2, 1977) *
National Emission Standard for Hazardous Air Pollutants, Proposed Amendments to Asbestos Standard
EPA, Research Triangle Park, NC, OAQPS

Proposed amendments. This notice lists the reasons EPA is proposing to prohibit the spraying of all materials which contain asbestos in excess of one percent by weight on buildings, structures, structural members, pipes, and conduits. This prohibition includes spray-on application of paints, decorative sprays, and weatherproofing. An amendment is also being proposed which would extend the coverage of the demolition and renovation provisions to include the proper removal of all friable materials which contain in excess of one percent asbestos prior to renovation or demolition of buildings, structures, facilities, or installations.

Descriptors: FR notice, Asbestos, Construction, Buildings and structures, Demolition and renovation

42 FR 28154 (Jun 2, 1977) *
National Emission Standards for Hazardous Air Pollutants: Vinyl Chloride
EPA, Research Triangle Park, NC, OAQPS

Proposed rule. This notice includes proposed amendments to the vinyl chloride standard, applying to new and existing ethylene dichloride-vinyl chloride and polyvinyl chloride plants. The intended effect of the proposed amendments is to require improved effectiveness of control technology at existing plants, to impose more stringent emission limits on new sources, and to prohibit an emission increase within the vicinity of an existing source due to the construction of a new source.

Descriptors: FR notice, Vinyl chloride, Ethylene dichloride/vinyl chloride plants, Polyvinyl chloride plants, Chemical industry

42 FR 55796 (Oct 18, 1977) *
Standards of Performance for New Stationary Sources, Emission Guideline for Sulfuric Acid Mist
EPA, Research Triangle Park, NC, OAQPS

Final guideline document availability. This action establishes emission guidelines and times for compliance and control of sulfuric acid mist from existing sulfuric acid plants. Section 111(d) of the Clean Air Act requires States to control emissions of designated pollutants from existing sources, and this rulemaking initiates the States' action and provides them with guidelines acceptable by EPA.

Descriptors: FR notice, Sulfuric acid, Sulfuric acid plants

43 FR 7597 (Feb 23, 1978) *
Kraft Pulp Mills, Draft Guideline Document: Availability
EPA, Research Triangle Park, NC, OAQPS

Notice of availability of draft guideline document. This action announces availability of a draft guideline document to control total reduced sulfur (TRS) emissions from existing kraft pulp mills and invites public comments on the contents of the document. This notice announces the Administrator's determination that TRS emissions are to be considered a welfare-related pollutant, giving States greater flexibility in developing their plans than would be the case if public health were affected.

Descriptors: FR notice, Sulfur compounds, Pulp mills

43 FR 26372 (Jun 19, 1978) *
National Emission Standards for Hazardous Air Pollutants, Amendments to Asbestos Standard
EPA, Research Triangle Park, NC, OAQPS

Final rule. This rule amends the national emission standard for asbestos by extending the requirements of the provisions which apply to the spraying of asbestos-containing materials and to demolition and renovation operations.

Descriptors: FR notice, Asbestos, Construction, Buildings and structures, Demolition and renovation

44 FR 21754 (Apr 11, 1979) *
Primary Aluminum Plants; Draft Guideline Document; Availability
EPA, Research Triangle Park, NC, OAQPS

Notice of availability of draft guideline document. This notice announces availability of a draft guideline document for the control of fluoride emissions from existing primary aluminum reduction plants and invites public comment on the document. This notice announces the Administrator's determination that fluoride emissions are to be considered a welfare-related pollutant, giving States greater flexibility in developing their plans than would be the case if public health were affected.

Descriptors: FR notice, Fluorides, Aluminum industry

44 FR 29828 (May 22, 1979) *
Kraft Pulp Mills, Final Guideline Document; Availability
EPA, Research Triangle Park, NC, OAQPS

Under the authority of Section 111(d) of the Clean Air Act, this action establishes emission guidelines and compliance times for State agencies to use in establishing standards of performance to control total reduced sulfur (TRS) emissions from existing kraft pulp mills.

Descriptors: FR notice, Sulfur compounds, Pulp mills

45 FR 26294 (Apr 17, 1980) *
Primary Aluminum Plants; Availability of Final Guideline Document
EPA, Research Triangle Park, NC, OAQPS

Notice of availability of final guideline document. Under the authority of Section 111(d) of the Clean Air Act, this action establishes emission guidelines and compliance times for State agencies to use in establishing standards of performance to control fluoride emissions from existing primary aluminum plants.

Descriptors: FR notice, Fluorides, Aluminum industry

45 FR 26660 (Apr 18, 1980) *
National Emission Standard for Hazardous Air Pollutants; Benzene Emissions from Maleic Anhydride Plants
EPA, Research Triangle Park, NC, OAQPS

Proposed rule and notice of public hearing. The proposed standard would limit benzene emissions from maleic anhydride plants. Emissions from existing sources would have to be reduced to 0.30 kilogram of benzene per 100 kilograms of benzene fed to the reactor. No detectable benzene emissions would be allowed from new sources. A new Test Method 110 is proposed for the determination of benzene emissions from stationary sources.

Descriptors: FR notice, Benzene, Maleic anhydride plants, Chemical industry

45 FR 83448 (Dec 18, 1980) *
National Emissions Standards for Hazardous Air Pollutants; Benzene Emissions from Ethylbenzene/Styrene Plants; Public Hearing.
EPA, Research Triangle Park, NC, OAQPS

Proposed rule and notice of public hearing. The proposed standard would limit benzene emissions from process vents at existing and new ethylbenzene and styrene (EB/S) plants to five parts per million by volume (ppmv) on a dry basis corrected to three percent oxygen.

Descriptors: FR notice, Benzene, Ethylbenzene/styrene plants, Chemical industry

45 FR 83952 (Dec 19, 1980) *
Benzene Emissions from Benzene Storage Vessels; National Emission Standard for Hazardous Air Pollutants; Hearing
EPA, Research Triangle Park, NC, OAQPS

Proposed rule and notice of public hearing. The proposed standard would limit benzene emissions from each new and existing storage vessel with a capacity greater than 4 cubic meters used to store pure benzene. The notice describes proposed requirements for fixed/floating roofs, primary and secondary seals, and inspection procedures.

Descriptors: FR notice, Benzene, Storage tanks

46 FR 1165 (Jan 5, 1981) *
National Emission Standard for Hazardous Air Pollutants; Benzene Fugitive Emissions
EPA, Research Triangle Park, NC, OAQPS

Proposed rule and notice of public hearing. The proposed standard would limit benzene emissions from new and existing fugitive emission sources containing 10 or more percent by weight benzene in the petroleum refining and chemical manufacturing industries. The proposed standard would allow no detectable emissions due to leaks from safety/relief valves and product accumulator vessels; would require a leak detection and repair program for pipeline valves and existing pumps and compressors; and would require certain equipment for new pumps, new compressors, sampling connections and open-ended valves.

Descriptors: FR notice, Benzene, Fugitive emissions sources, Petroleum refineries, Chemical industry

47 FR 53059 (Nov 24, 1982) *
National Emission Standards for Hazardous Air Pollutants; Benzene Emissions from Benzene Storage Vessels
EPA, Research Triangle Park, NC, OAQPS

Notice of additional emissions test data. This notice announces the receipt of additional emissions test data for evaluation and inclusion in the project docket for the benzene storage vessel national emission standards for hazardous air pollutants (NESHAP). The American Petroleum Institute (API) has completed an internal floating roof emissions testing program that provides new technical data for the evaluation of available control technologies.

Descriptors: FR notice, Benzene, Storage tanks

48 FR 15076 (Apr 6, 1983) *
National Emission Standards for Hazardous Air Pollutants; Standards for Radionuclides
EPA, Washington, DC, ORP

Pursuant to Section 112, EPA is proposing standards (including appropriate reporting requirements) for sources of emissions of radionuclides in four categories: (1) Department of Energy (DOE) Facilities, (2) Nuclear Regulatory Commission (NRC) licensed facilities and non-DOE Federal facilities, (3) underground uranium mines, and (4) elemental phosphorous plants. The Environmental Protection Agency (EPA) has identified several additional source categories that emit radionuclides and has determined there are good reasons for not proposing standards at this time for these categories. They are the following: (1) coal-fired boilers, (2) the phosphate industry, (3) other extraction industries, (4) uranium fuel cycle facilities, uranium mill tailings, management of high level waste, and (5) low energy accelerators.

Descriptors: FR notice, Radioactive contaminants, Mining, Phosphate industry, Hazardous waste disposal, Nuclear power plants, Nuclear research and development, Manufacturing radionuclide products, Plutonium manufacturing, Pharmaceutical industry

48 FR 32126 (Jul 13, 1983) *
National Emission Standards for Hazardous Air Pollutants; Amendments to Asbestos Standard
EPA, Research Triangle Park, NC, OAQPS

Proposed rule and notice of public hearing. These proposed amendments to the national emission standard for asbestos would reinstate work practice and equipment provisions of the standard that were held not to be emission standards by the Supreme Court in 1978.

Descriptors: FR notice, Asbestos, Milling, Manufacturing asbestos products, Construction, Buildings and structures, Roadway surfacing, Demolition and renovation, Hazardous waste disposal

48 FR 33112 (Jul 20, 1983) *
National Emission Standards for Hazardous Air Pollutants;
Proposed Standards for Inorganic Arsenic
EPA, Research Triangle Park, NC, OAQPS

Proposed rule and announcement of public hearing. In this notice, EPA is proposing standards for certain source categories of inorganic arsenic emissions to the ambient air and is proposing not to regulate others. Pursuant to Section 112, EPA is proposing standards for the following categories of sources of emissions of inorganic arsenic: high-arsenic primary copper smelters, low-arsenic primary copper smelters, and glass manufacturing plants. EPA identified other categories of sources emitting inorganic arsenic; and, after careful study, determined that the proposal of standards for these categories of sources is not warranted at this time. These categories of sources are primary lead smelters, secondary lead smelters, primary zinc smelters, zinc oxide plants, cotton gins, and arsenic chemical manufacturing plants.

Descriptors: FR notice, Arsenic (inorganic), Glass industry, Smelters

48 FR 55880 (Dec 16, 1983) *
National Emission Standards for Hazardous Air Pollutants;
Proposed Standards for Inorganic Arsenic
EPA, Research Triangle Park, NC, OAQPS

Reopening of public comment period. The period for receiving written comments on the proposed national emission standards for inorganic arsenic is being reopened. EPA is extending the public comment period in response to several requests to do so.

Descriptors: FR notice, Arsenic (inorganic), Glass industry, Smelters

49 FR 8386 (Mar 6, 1984) *
National Emission Standards for Hazardous Air Pollutants;
Benzene Emissions from Maleic Anhydride Plants, Ethylbenzene/Styrene Plants, and Benzene Storage Vessels;
Proposed Withdrawal of Proposed Standards
EPA, Research Triangle Park, NC, OAQPS

Proposal to withdraw proposed standards. This notice proposes to withdraw the proposed standards for benzene emissions from these source categories for the reason that both the benzene health risks (annual leukemia incidence and maximum lifetime risk) to the public from these source categories and the potential reduction in health risks achievable with available control techniques are too small to warrant federal regulatory action under Section 112 of the Clean Air Act.

Descriptors: FR notice, Benzene, Maleic anhydride plants, Storage tanks, Ethylbenzene/styrene plants, Chemical industry

49 FR 10278 (Mar 20, 1984) *
National Emission Standards for Hazardous Air Pollutants;
Proposed Standards for Inorganic Arsenic
EPA, Research Triangle Park, NC, OAQPS

Notice of reopening of public comment period and request for comments. This notice announces reopening of public comment period for proposed national emission standards for inorganic arsenic used in glass manufacturing plants. Data received since proposal of the standard indicate that more vapor phase inorganic arsenic emissions may be occurring from furnaces producing soda-lime glass than from furnaces producing other types of glass. EPA is requesting comments on three regulatory options for soda-lime furnaces. EPA is also soliciting comments on a possible revision to the zero production rate offsets.

Descriptors: FR notice, Arsenic (inorganic), Glass industry, Smelters

49 FR 13658 (Apr 5, 1984) *
National Emission Standards for Hazardous Air Pollutants;
Amendments to Asbestos Standard
EPA, Research Triangle Park, NC, OAQPS

Final rule. This action promulgates amendments proposed July 13, 1983, intended to reinstate work practice and equipment provisions of the standard that were held not to be emission standards by the U.S. Supreme Court in 1978.

Descriptors: FR notice, Asbestos, Milling, Manufacturing asbestos products, Construction, Buildings and structures, Roadway surfacing, Demolition and renovation, Hazardous waste disposal

49 FR 23478 (Jun 6, 1984) *
National Emission Standards for Hazardous Air Pollutants;
Regulation of Benzene
EPA, Research Triangle Park, NC, OAQPS

Response to public comments. This notice responds to public comments on the listing, health effects, and regulation of benzene as a hazardous air pollutant.

Descriptors: FR notice, Benzene, Maleic anhydride plants, Storage tanks, Ethylbenzene/styrene plants, Chemical industry

49 FR 23522 (Jun 6, 1984) *
National Emission Standards for Hazardous Air Pollutants;
Proposed Standards for Benzene Emissions from Coke By-Product Recovery Plants
EPA, Research Triangle Park, NC, OAQPS

Proposed rule and notice of public hearing. The proposed standard would limit benzene emissions from new and existing sources in coke by-product recovery plants.

Descriptors: FR notice, Benzene, Coke by-product recovery plants

49 FR 43906 (Oct 31, 1984) *
National Emission Standards for Hazardous Air Pollutants;
Regulation of Radionuclides
EPA, Research Triangle Park, NC, ORP

Withdrawal of proposed standards. The Agency announces withdrawal of its four standards for radionuclide emissions, effective Oct. 31, 1984.

Descriptors: FR notice, Radioactive contaminants, Mining, Phosphate industry, Hazardous waste disposal, Nuclear power plants, Nuclear research and development, Manufacturing radionuclide products, Plutonium manufacturing, Pharmaceutical industry

49 FR 43915 (Oct 31, 1984) *
National Emission Standards for Hazardous Air Pollutants; Standards for Radon-222 Emissions from Underground Uranium Mines
EPA, Research Triangle Park, NC, ORP

Advance notice of proposed rulemaking. The agency announces its intent to start a program to consider a standard based on bulkheading or related techniques to control radon emissions from underground uranium mines. This standard could be an emission standard, or a design, equipment, work practice, or operational standard, or a combination thereof.

Descriptors: FR notice, Radioactive contaminants, Mining

49 FR 43916 (Oct 31, 1984) *
National Emission Standards for Hazardous Air Pollutants; Standards for Radon-222 Emissions from Licensed Uranium Mills
EPA, Washington, DC, ORP

Advance notice of proposed rulemaking. The Agency announces its intent to consider development of standards to control radon-222 emissions from licensed uranium mills.

Descriptors: FR notice, Radioactive contaminants, Milling

49 FR 46294 (Nov 23, 1984) *
Proposed Guidelines for Carcinogen Risk Assessment
EPA, Washington, DC, OHEA

Proposed guidelines for carcinogen risk assessment and request for comments. This is the first revision of the 1976 Interim Procedures and Guidelines for Health Risk Assessments of Suspected Carcinogens (U.S. EPA, 1976; Albert et al., 1977). These guidelines describe the general framework to be followed in developing an analysis of carcinogenic risk and some salient principles to be used in evaluating the quality of data and in formulating judgments concerning the nature and magnitude of the cancer hazard from suspect carcinogens.

Descriptors: FR notice

49 FR 46304 (Nov 23, 1984) *
Proposed Guidelines for Exposure Assessment
EPA, Washington, DC, OHEA

Proposed guidelines for exposure assessment and request for comments. These guidelines provide the Agency with a general approach and framework for carrying out human or nonhuman exposure assessments for specified pollutants.

Descriptors: FR notice

49 FR 46314 (Nov 23, 1984) *
Proposed Guidelines for Mutagenicity Risk Assessment
EPA, Washington, DC, OHEA

Proposed guidelines for mutagenicity risk assessment and request for comments. The current proposed guidelines address the comments received in response to the Agency's proposed mutagenicity risk assessment guidelines and provide the basis for the Agency's risk assessments for mutagenicity. The guidelines adopt the general approach set forth in the 1980 proposal, but reflect additional changes made in response to the comments and to new scientific information generated since the time of the proposal.

Descriptors: FR notice

49 FR 46324 (Nov 23, 1984) *
Proposed Guidelines for the Health Assessment of Suspect Developmental Toxicants
EPA, Washington, DC, OHEA

Proposed guidelines for the health assessment of suspect developmental toxicants and requests for comments. These guidelines describe the procedures that EPA will follow in evaluating potential developmental toxicity associated with human exposure to environmental toxicants.

Descriptors: FR notice

PART 4. APPENDIX: UNPUBLISHED SOURCES OF EPA INFORMATION

CANCER RISK ASSESSMENTS

Cancer risk assessments have been prepared for the chemicals listed below. These assessments were prepared by the Carcinogen Assessment Group located in the EPA Office of Health and Environmental Assessment. Most of these assessments are preliminary in nature and many are several years old. In the case of scientific reports such as these, updating is always necessary and revisions could substantially alter the unit risk information. Several risk assessments have been revised and updated and are contained in the health assessment documents, which are listed in both the Document Type Index and the Pollutant Name/Class Index. These revised and updated risk assessments are indicated below with a single asterisk (*) and are available from the National Technical Information Service (NTIS). Other risk assessments, which are in the process of being revised and updated, are indicated below with a double asterisk (**).

Single copies of the preliminary assessments (without an asterisk [*]) are available to state and local air pollution control agencies. Requests should be made in writing to:

Technical Information Unit (RD-689)
Office of Health and Environmental Assessment
U.S. Environmental Protection Agency
401 M. Street, S.W.
Washington, D.C. 20460

The following 34 chemicals have been reviewed by the Carcinogen Assessment Group:

- Acetaldehyde
- **Acrolein
- *Acrylonitrile
- Allyl Chloride
- *Arsenic
- Benzene
- Benzyl chloride
- **Beryllium
- *Cadmium
- *Chlorobenzene
- *Coke oven emissions
- Cresols
- *Epichlorohydrin
- Ethylene dibromide (EDB)
  - (1,2-Dibromoethane)
- *Ethylene dichloride
- *Ethylene oxide
- Formaldehyde
- Maleic anhydride
- *Manganese
- *Methyl chloroform
- Methyl iodide
- *Methylene chloride
- *Nickel
- Nitrobenzene
- Nitrosamines
- Phosgene
- Polycyclic organic matter (POM)
- Propylene oxide
- *Tetrachloroethylene
  - (Perchloroethylene)
- *Toluene
- *Trichloroethylene
- Vinyl chloride
- *Vinylidene chloride
- Xylenes

*These risk assessments have been updated and are included in OHEA's health assessment documents, which are available from the National Technical Information Service (NTIS).

**These risk assessments are in the process of being updated as part of OHEA's health assessment documents and will soon be available in draft form.

CHEMICAL HAZARD INFORMATION PROFILES

A Chemical Hazard Information Profile (CHIP), which is prepared by EPA's Office of Pesticides and Toxic Substances (OPTS), is a brief summary of readily available information concerning the health and environmental effects and potential exposure to a chemical. The OPTS chooses chemicals for CHIP preparation on the basis of information indicating a potential for adverse health or environmental effects along with evidence of significant production or some type of exposure.

Information gathering for a CHIP is generally limited to a search of secondary literature sources, which are identified by a search of automated data bases and standard reference works. The OPTS also solicits unpublished information about the selected chemicals from individuals and companies. The search is not intended to be exhaustive, although in-depth searches on specific topics may be done on a case-by-case basis.

In general, no attempt is made to evaluate or validate information at this stage of assessment. Preparation of a CHIP is part of the first stage in the OPTS chemical risk assessment process. The purpose of the CHIP is to enable OPTS to make a tentative decision on an appropriate course of action for the subject chemical and to identify and characterize problems that may require more thorough investigation and evaluation.

A list of individual CHIPs by subject appears below. For more detailed information as to all the chemical names and the CAS numbers that appear in each CHIP, or to obtain a copy of any of the available CHIPs, contact:

TSCA Industry Assistance Office (TAO) (TS-799)
U.S. Environmental Protection Agency
Washington, D.C. 20460
800-424-9065 (toll free)
(202) 554-1404 (in Washington, D.C. or from outside continental U.S.)

The following list of Chemical Hazard Information Profiles is current through December 1984. An asterisk (*) indicates entries that are new to this edition of the Bibliography. To update this list, consult the TSCA Chemicals-in-Progress Bulletin, which notifies the public as new CHIPs are completed. In order to get on the mailing list for the free bulletin, contact the TAO as indicated above.

Acetaldehyde
Acetaldehyde-2
Acetonitrile
Acrolein
Acrylic acid
Adipate ester plasticizers
Alkyl phthalates
Alkylated phenol sulfides*
Allyl chloride
Aluminum and aluminum compounds
Aminoanthraquinone
Amino-9-ethyl carbazole
o-Aminophenol*
p-Aminophenol*
Aminoundecanoic acid
Aniline

Antimony trioxide
Auramine
Azobenzene
Benzal chloride
Benzotrichloride
Benzoyl chloride
Benzyl acetate
Benzyl chloride
Biphenyl
Bisphenol A
Brilliant Blue FCF
Bromine and bromine compounds
Butadiene
Butanol (iso)
Butyl benzaldehyde
Butyl benzoic acid
Butyl hydroperoxide
Butyl toluene
C.I. Disperse Yellow 3
Carbon black 1
Carbon black 2
Carbon tetrachloride
Chloronitrobenzene (2-)
Chloronitrobenzene (4-)
Chlorobenzotrichloride (4-)
Chlorodifluoromethane
Chloroethane 1
Chloroethane 2
Chloroethylene
Chlorohydrin (alpha)
Chloromethane
Chloro methyethyl 1 ether (bis)
Cobalt naphthenate
Cumene hydroperoxide
Cutting fluids
Cyanuric acid and chlorinated
  derivatives
Cyclohexylamine
D and C Red #9
Diaminoazobenzene (2,4-)
Diaminobiphenyl ether 1
Diaminobiphenyl ether 2
Diaminohexane
Diazabicyclooctane
Dibromoethane
Dichloroacetaldehyde
Dichloroethane
Dichloromethane
Dichloro dioxane
Dichloropropane
Diethylene glycol
Diethylphosphorochlorothioate
Dihydrosafrole*
Dimethoxane 1
Dimethoxane 2
Dimethylformamide 1
Dimethylformamide 2
Dimethyl methylphosphonate
Dimethylphosphorochlorothioate
Dimethylthiourea
Dinitrochlorobenzene
Dinitrophenol
Dinitrosopentamethylenetetramine
Dinitrotoluene
Dioxane
Epoxy/Chlorohydroxy*
Ethanolamines
Ethoxyethanol
Ethoxyethanol acetate
Ethyl acrylate
Ethylamines
Ethylene oxide
Ethylenediamine
Ethylenediaminetetra*
Ethylhexyl acrylate
Formaldehyde
Formamide
Gentian violet
Hexachlorocyclopentadiene
Hexachloroethane
Hexachloronorbornadiene
Hexafluoroacetone
Hexamethylphosphoramide
Hexamethylphosphoramide 2
Hexane
High explosive
Hydrazobenzene
Isobutyl alcohol*
Isopropyl alcohol 1
Isopropyl alcohol 2
Lithium and lithium compounds
Maleic anhydride 1
Maleic anhydride 2
Melamine
Mercaptobenzothiazole disulfide
Methanol
Methoxyethanol
Methoxyethanol acetate

Methyl ethyl ketone peroxide
Methyl N-Amyl ketone
Methyl N-Butyl ketone
Methylamines
Methylcyclohexane
Methylcyclopentadienyl manganese
  tricarbonyl
Methylene bis (2-chloroaniline)
Methyl diphenyl-diisocyanate*
Methylenebis(n,n-dimethyl)-
  benzenamine
Methylnitropropyl*
Methylpyridine (2-)
Methylpyridine (3-)
Methylpyridine (4-)
Mono/dichlorophenols
Morpholine
Neopentyl glycol diacrylate
Neopentyl glycol diglycidyl ether
Nitro-o-anisidine
Nitro-o-toluidine
Nitrobenzene
Nitropropane
Nitroso compounds
Nitrosodiphenylamine
Oxybis(2-methoxy)ethane
Pentabromochlorocyclohexane
Pentachloroethane
Petanone
Phenyl glycidyl ether
Phenylenediamines
Phosgene
Polysorbate 20
N-Propyl alcohol*
Propionitrile
Quartz, Silica, Crystalline
Quinoline*
Rhodamine B
Semicarbazide
Sodium azide
Styrene oxide
Sulfolane*
Sulfur hexafluoride
Tellurium 1
Tellurium 2
Terephthalic acid
Tetrabromoethane
Tetrachloroethane
Tetrahydrofuran 1
Tetrahydrofuran 2
Tetramethylsuccinonitrile
Thiourea
Thorium dioxide
TMOHS (Silane A-186)
Toluene
Toluene diisocyanate*
Toluene-2,4-diamine
ortho-Toluidene*
Tribromophenol
Trichloroacetaldehyde
Trichlorobutylene oxide
Trichloroethane
Triethanolamine
Triethylene tetramine
Trimellitic anhydride
Trimethyl phosphite
Trinitrofluorenone
Trinitrotoluene
Trioctylamine
Tris(1,3-dichloro-2-propanol)Phosphate*
Urethane
Vermiculite
Vinyl acetate*
Vinyl bromide
Vinyl fluoride
Vinyl-1-cyclohexene
Vinylidene bromide
Vinylidene fluoride
Ziram

EXPOSURE ASSESSMENTS/MATERIAL BALANCES

A set of microfiche containing primarily unpublished exposure assessments and material balances is available on loan from EPA. Some of these assessments discuss multi-media exposure and others discuss exposure via a single medium. Three copies of the set may be borrowed for a one-month period from the Office of Health and Environmental Assessment (contact Dr. Thomas McLaughlin, U.S. EPA, Office of Health and Environmental Assessment (RD-689), 401 M. Street, SW, Washington, D.C. 20460) and one copy is available to be checked out from each of EPA's ten regional libraries. A new set which includes additional substances is scheduled to be available in June 1985. The set includes information for the following substances in CAS number order:

-	Coke oven emissions
-	Polycyclic aromatic hydrocarbons (PAH's)
-	Chlorofluorocarbons (CFC's)
-	Chlorophenols
50-00-0	Formaldehyde
50-29-3	DDT
50-32-8	Benzo(a)pyrene
56-23-5	Carbon tetrachloride
57-12-5	Cyanide
57-74-9	Chlordane
58-90-2	2,3,4,6-Tetrachlorophenol
67-66-3	Chloroform
67-72-1	Hexachloroethane
71-43-2	Benzene
71-55-6	1,1,1-Trichloroethane
75-07-0	Acetaldehyde
75-09-2	Methylene chloride
75-21-8	Ethylene oxide
75-34-3	1,1-Dichloroethane
75-35-4	1,1-Dichloroethylene
75-44-5	Phosgene
75-56-9	Propylene oxide
75-71-8	Dichlorodifluoromethane
76-44-8	Heptachlor
77-47-4	Hexachlorocyclopentadiene
79-00-5	1,1,2-Trichloroethane
79-01-6	Trichloroethylene
79-06-1	Acrylamide
79-34-5	1,1,2,2-Tetrachloroethane
79-46-9	2-Nitropropane
84-66-2	Diethyl phthalate
84-74-2	Dibutyl phthalate
85-44-9	Phthalic anhydride
85-68-7	Butyl benzyl phthalate
87-86-5	Pentachlorophenol
88-06-2	2,4,6-Trichlorophenol

91-20-3	Naphthalene
95-47-6	o-Xylene
95-48-7	o-Cresol
95-50-1	o-Dichlorobenzene
95-57-8	2-Chlorophenol
95-80-4	4-Methyl-1,3-benzenediamine
95-94-3	1,2,4,5-Tetrachlorobenzene
95-95-4	2,4,5-Trichlorophenol
98-95-3	Nitrobenzene
100-41-4	Ethylbenzene
100-44-7	Benzyl chloride
101-14-4	4,4'-Methylenbis(2-chloroaniline) (MOCA)
103-23-1	Di(2-ethylhexyl) adipate
106-42-3	p-Xylene
106-44-5	p-Cresol
106-46-7	p-Dichlorobenzene
106-48-9	4-Chlorophenol
106-89-8	Epichlorohydrin
106-93-4	1,2-Dibromoethane
107-02-8	Acrolein
107-05-1	Allyl chloride
107-06-2	1,2-Dichloroethane
107-13-1	Acrylonitrile
108-38-3	m-Xylene
108-39-4	m-Cresol
108-80-5	Cyanuric acid
108-88-3	Toluene
108-90-7	Chlorobenzene
108-95-2	Phenol
110-91-8	Morpholine
117-81-7	Di(2-ethylhexyl) phthalate
117-84-0	Di-n-octyl phthalate
118-74-1	Hexachlorobenzene
120-82-1	1,2,4-Trichlorobenzene
120-83-2	2,4-Dichlorophenol
124-40-3	Dimethylamine
126-99-8	Chloroprene
127-18-4	Tetrachloroethylene
139-13-9	Nitrilotriacetic acid
143-50-0	Kepone
540-59-0	1,2-Dichloroethylene
542-88-1	Bis(chloromethyl) ether
593-60-2	Vinyl bromide
608-93-5	Pentachlorobenzene
634-90-2	1,2,3,5-Tetrachlorobenzene
1024-57-3	Heptachlor epoxide
1318-00-9	Vermiculite
1336-36-3	Polychlorinated biphenyls (PCB's)
1746-01-6	Dioxin

7439-92-1	Lead
7439-96-5	Manganese
7439-97	Mercury
7440-02-4	Nickel
7440-22-4	Silver
7440-38-2	Arsenic
7440-39-3	Barium
7440-41-7	Beryllium
7440-43-9	Cadmium
7440-47-3	Chromium
7440-50-8	Copper
7440-66-6	Zinc
8001-35-2	Toxaphene
9002-86-2	Polyvinyl chloride
9010-98-4	Polychloroprene
11104-93-1	Nitrogen oxides